

PUBLIC HEALTH REPORTS

VOL. 44

NOVEMBER 15, 1929

NO. 46

A STUDY OF THE PELLAGRA-PREVENTIVE ACTION OF CANNED SALMON

By JOSEPH GOLDBERGER¹ and G. A. WHEELER, *Surgeons, United States Public Health Service*

In many of the smaller and more isolated industrial communities, as well as in much of the rural area of the South in which pellagra is endemic, the fresh-meat supply is often very restricted, especially in the spring and summer months. During this period fresh meat is, to a varying degree, replaced by preserved meats of some sort, often including fish. Among the preserved fish, canned salmon appears to be quite generally used. This observation led to a test (1) of its blacktongue-preventive action in the dog, resulting in full protection against this condition.

As the study in the dog showed clearly that canned salmon has a decided preventive value in blacktongue, and, in view of the abundant evidence (1) (2) (3) that canine blacktongue is the analogue of human pellagra, a comparable study of the value of canned salmon in pellagra was organized at the Georgia State Sanitarium, Milledgeville, Ga., in October, 1927, through the courtesy and sustained cooperation of the board of trustees, superintendent, officers, and staff. The results of this study are reported here.

As in the experimental work in the dog, canned Alaska chum salmon was used. The chum salmon is one of the cheaper grades, and for this reason was the one selected for study. The entire contents of the can (454 grams), including bone, skin, and liquid portion, were thoroughly mixed and incorporated in the cooked cereal-legume portion of the basic diet. Each patient was allowed six ounces of salmon per day, receiving approximately 1.7 ounces with the morning and evening meals and 2.6 ounces at midday. The composition of the salmon-supplemented diet is shown in the accompanying table.

¹ This study was organized prior to the death of Surgeon Goldberger and was, for the most part, conducted under his direction. The manuscript was prepared by the junior author.

TABLE 1.—*Approximate composition¹ of a salmon-supplemented diet offered daily to each of a group of white insane female pellagrins*

[Total calories 2,050]

Articles of diet	Quantity	Nutrients		
		Protein	Fat	Carbohydrate
Basic:				
Cornmeal ²	256	21.5	12.0	159.4
Cowpeas ³	42	8.98	.6	25.5
Wheat flour.....	21	2.4	.2	15.8
Lard.....	49		49.0	
Tomato juice ⁴	126			
Supplemental:				
Canned salmon ⁵	168	33.1	12.4	
Cod-liver oil.....	14		14.0	
Calcium carbonate.....	3			
Sirup iodide of iron (U. S. P.) (2 drops).....				
Dilute hydrochloric acid (U. S. P.) (90 drops).....				
Total nutrients.....		68.98	88.2	230.7

¹ Except for salmon, factors used for computing are from Atwater and Bryant, Office of Experiment Stations, U. S. Department of Agriculture Bulletin No. 28, 1906.

² Whole maize, sifted in kitchen and made into cornbread and "mush."

³ The variety known as California black-eyed pea. Ground into a coarse meal and boiled.

⁴ Expressed juice of canned tomatoes.

⁵ Alaska chum salmon (canned). Analysis made in the division of chemistry, Hygienic Laboratory.

A total of 18 white female patients came under observation for pellagra-preventive treatment with this diet during the period of the test, all of whom remained under continuous observation for a period of not less than one year. None of these presented, at any time, symptoms suggestive of pellagra. In the light of repeated experience it seems safe to state that, without the salmon or some other equivalent preventive food in the diet, not less than 40 or 50 per cent of them would have suffered a recurrence within a period of from three to seven months. The fact that none of the group showed symptoms even suggestive of pellagra would seem to be convincing evidence of the pellagra-preventive action of the salmon and of the presence of the pellagra-preventive factor in canned Alaska chum salmon. The quantity of salmon allowed was fairly liberal. Whether a smaller allowance might have been equally effective can not be stated.

The demonstration that salmon contains the pellagra-preventive factor is of considerable interest. In the first place it is a readily available preserved food, comparatively cheap, and, if used in sufficient quantity, constitutes a dependable substitute for fresh meat, at least in so far as the pelagra-preventive factor is concerned. The results are also in harmony with certain previously recorded experiments showing that substances possessing blacktongue-preventive potency are also preventives of pellagra, and thus furnishes additional evidence that blacktongue in dogs is the analogue of pellagra in man.

SUMMARY AND CONCLUSIONS

1. Canned salmon (Alaska chum) contains the pellagra-preventive factor.
2. By reason of its potency in the P-P factor, and its availability in the preserved state, salmon may be considered a fair substitute for meat in the areas of pellagra endemicity when meat is not readily available.
3. The demonstration of the pellagra-preventive value of canned salmon furnishes further evidence of the soundness of the working hypothesis that blacktongue of dogs is the analogue of pellagra in man.

REFERENCES

- (1) Goldberger, Wheeler, Lillie, and Rogers: The Blacktongue Preventive Action of Sixteen Foodstuffs. Pub. Health Rep., vol. 43, No. 23 (June 8, 1928). (Reprint No. 1231.)
- (2) Goldberger, Wheeler, Lillie, and Rogers: A Further Study of Butter, Fresh Beef and Yeast As Pellagra-Preventives, With Consideration of the Relation of Factor P-P of Pellagra (and Blacktongue of Dogs) to Vitamin B. Pub. Health Rep., vol. 41, No. 8 (February 19, 1926). (Reprint No. 1062.)
- (3) Goldberger and Wheeler: Experimental Blacktongue of Dogs and Its Relation to Pellagra. Pub. Health Rep., vol. 43, No. 4 (January 27, 1928). (Reprint No. 1205.)

CITY HEALTH OFFICERS, 1929**Directory of Those in Cities of 10,000 or More Population**

Directories of the city health officers in the cities of the United States having a population of 10,000 or more have been published in the Public Health Reports¹ for each year from 1916 to 1928 for the information of health officers and others interested in public-health activities. These directories have been complied from data furnished by the health officers. The cities included in this directory are those having 10,000 or more population.

The asterisk (*) indicates that the officer so designated has been reported to be a "whole-time" health officer. For this purpose a "whole-time" officer is defined as "one who does not engage in the practice of medicine or in any other business but devotes all his time to official duties."

¹ Reprints Nos. 346, 416, 494, 539, 599, 702, 767, 876, 930, 1025, 1103, 1177, and 1257 from the Public Health Reports.

City	Name of health officer	Official title
Alabama:		
Anniston	*George A. Cryer, M. D.	County health officer.
Bessemer	Robert V. Hazlewood, D. V. M.	Director of sanitation and food and dairy inspector. County health officer.
Birmingham	*J. D. Dowling, M. D.	Do.
Dothan	*Russell E. Neff, M. D.	Do.
Florence	W. D. Hubbard, M. D.	County and city health officer.
Gadsden	Walter H. Harper, M. D.	Do.
Mobile	*C. A. Mohr, M. D.	County health officer.
Montgomery	*J. L. Bowman, M. D.	County and city health officer.
Selma		Do.
Tuscaloosa		
Arizona:		
Douglas	*A. A. Kirk, M. D.	City health officer.
Phoenix	Z. Causey, M. D.	Do.
Tucson	Harry J. Felch, M. D.	Do.
	Alvin Kirnuse, M. D.	
Arkansas:		
Fort Smith	*J. E. Johnson, M. D.	District health officer.
Helena	Walter B. Bruce, M. D.	Field agent, United States Public Health Service.
Hot Springs	*J. F. Merritt, M. D.	City and county health officer.
Jonesboro	Charles H. Lutterloh, M. D.	City health officer.
Little Rock	*W. G. Scogale	Do.
North Little Rock	James A. Summers, M. D.	Do.
Pine Bluff	*George A. Hays, M. D.	Director, health department.
California:		
Alameda	Arthur Hieronymus, M. D.	Health officer.
Alhambra	*Samuel J. Stewart, M. D.	District health officer.
Bakersfield	Peter J. Cuneo, M. D.	Health officer.
Berkeley	*Frank L. Kelly, M. D.	Do.
Chico	Charles E. Tovee	City health officer.
Eureka	John N. Chain, M. D.	City physician and health officer.
Fresno	C. Mathewson, M. D.	Health officer.
Glendale	*E. M. Miller, M. D.	Do.
Long Beach	*Grandy E. McDonald, M. D.	City health officer.
Los Angeles	*George Parish, M. D.	Health officer.
	G. S. Porter, M. D.	First assistant health officer.
	Divisional directors—	
	Harry H. East, M. D.	Assistant health officer.
	Harry Cohn, M. D.	Director of tuberculosis.
	A. V. Nasatir, M. D.	Director of child welfare.
	George M. Stevens, M. D.	Epidemiologist.
	Agnes M. Taleott	Chief nurse.
	Robert B. Forsyth	Chief accountant.
	F. W. Peterson	Director of vital statistics.
	John Carman	Chief chemist.
	L. V. Dieter	Director of laboratories.
	Mona Bettin, M. D.	Chief bacteriologist.
	F. D. Sweger	Director housing and sanitation.
	William Veit, M. D.	Director milk and meat inspection.
	H. H. Matthieson	Sanitary engineer.
	John Nelson	Chief meat inspector.
	Frank Meiford	Chief fruit and vegetable inspector.
	E. F. McGonigle	Chief clerk morbidity division.
	A. M. Rogers, M. D.	Director venereal clinic (male).
	Hannah J. Beatty, M. D.	Director venereal clinic (female).
	Lyle McNeile, M. D.	Director maternity division.
	C. K. Stewart	Director of rodent division.
	J. M. Cain	Quarantine division.
Modesto	J. W. Morgan, M. D.	Health officer.
Oakland	Charles R. Fancher, M. D.	Do.
Pasadena	*J. D. Dunshee, M. D.	Health officer and city physician.
Pomona	*Eugene F. Fontaine, M. D.	District health officer.
Richmond	Charles R. Blake, M. D.	Commissioner of health.
Riverside	*W. B. Wells, M. D.	Do.
Sacramento	J. Howard Hall, M. D.	City health officer.
San Bernardino	W. W. Fenton, M. D.	Do.
San Diego	Alex M. Lesem, M. D.	Do.
San Francisco	William C. Hassler, Ph. G., M. D.	Health officer and local registrar.
	Herbert F. True, M. D.	Chief of division.
	Thomas P. Lydon	Do.
	Carl G. Hansen	Do.
	William T. Montgomery	Do.
	William D. Hobro	Do.

November 15, 1929

City	Name of health officer	Official title
California—Continued.		
San Francisco—Continued.		
Child-welfare division (includes social service).	Eleanor Stockton, P. H. N.....	Director field nursing.
School-health division.....	Thomas D. Maher, M. D.....	Director of child hygiene.
Dental division.....	Robert Gross, D. D. S.....	Chief dentist.
Psychological division.....	Olga Bridgman, M. D.....	Psychologist.
Chest clinic division (tuberculosis).	W. R. P. Clark, M. D.....	Director.
Social hygiene division.....	R. W. Burlingame, M. D.....	Chief clinician.
Bacteriological division.....	Anna D. MacRae, M. D.....	Director.
Chemical laboratory.....	Clinton Davis.....	Chief chemist.
Auditing division.....	Percy R. Hennessy.....	Auditor.
San Francisco Hospital.....	Leon M. Wilbor, M. D.....	Superintendent.
Laguna Honda Home.....	Charles M. Wollenberg.....	Do.
Emergency service.....	Edmund Butler, M. D.....	Chief surgeon.
San Jose.....	*Henry C. Brown, M. D.....	Health officer.
Santa Ana.....	*K. H. Sutherland, M. D.....	County health officer.
Santa Barbara.....	*William H. Eaton, M. D.....	Health officer.
Santa Cruz.....	John T. Harrington, M. D.....	City health officer.
Santa Monica.....	*William F. Reasner, M. D.....	Health officer.
Stockton.....	*John J. Sippy, M. D.....	District health officer.
Vallejo.....	E. A. Peterson, M. D.....	Health officer.
Colorado:		
Boulder.....	Carl H. Graef, M. D.....	City health officer.
Colorado Springs.....	Omer R. Gillett, M. D.....	Do.
Denver.....	*B. B. Jaffa, M. D.....	Manager of health and charity.
Greeley.....	B. Woodcock, M. D.....	City physician.
Pueblo.....	W. E. Buck, M. D.....	Chief department of health.
Trinidad.....	G. W. Robinson, M. D.....	City physician.
Connecticut:		
Ansonia.....	William H. O'Neill, M. D.....	Health officer.
Bridgeport.....	*William Francis Wild, M. D., C. P. H.....	Do.
Bristol.....	Benjamin B. Robbins, M. D.....	Do.
Danbury.....	Thomas F. Plunkett, M. D.....	Do.
Derby.....	Harvey Burton Goddard, M. D.....	Do.
East Hartford.....	Frank F. Simonton, M. D.....	Health officer.
Enfield.....	*Lawrence E. Poole, M. D., Dr. P. H. A. E. Austin, M. D.....	Health officer and school physician.
Fairfield.....	*Charles P. Botsford, M. D.....	Health officer.
Greenwich.....	D. C. Y. Moore, M. D.....	Superintendent of health.
Hartford.....	H. DeForest Lockwood, M. D.....	Chairman board of health.
Manchester.....	John H. Mountain, D. D. S., M. D.....	Health officer.
Meriden.....		Do.
Middletown.....		
Milford.....	*Richard Woollard Pullen, M. D.....	Superintendent of health.
Naugatuck.....	*John Levi Rice, M. D.....	Health officer.
New Britain.....	Benjamin N. Pennell, D. V. S.....	Do.
New Haven.....	Robert E. Perdue, M. D.....	Health commissioner.
New London.....	Edward J. Brophy, M. D.....	Health officer.
Norwalk.....		
Norwich.....	William S. Randall, Ph. B., M. D.....	Do.
Orange.....	*R. D. Fear, M. D., Dr. P. H. D. E. G. Taylor, M. D.....	Health commissioner.
Shelton.....	DeRuyter Howland, M. D.....	Town health officer.
Stamford.....		
Stonington (Mystic).....	*Edw. J. Godfrey, M. D.....	Health officer.
Stratford.....	L. A. Cushman, M. D.....	Do.
Torrington.....	W. P. S. Keating, M. D.....	City health officer.
Wallingford.....		
Waterbury.....	Fred F. Armstrong, M. D.....	Secretary board of health.
West Hartford.....	*William C. Fowler, M. D.....	Health officer.
Willimantic.....	Edward J. Schwartz, M. D.....	Assistant health officer.
Windham.....	Arthur G. Cole.....	Chief clerk and deputy health officer.
Delaware:		
Wilmington.....	James G. Cumming, M. D.....	Director.
District of Columbia:		
Washington.....	Joseph A. Murphy, M. D.....	Do.
Bureau of preventable diseases.	Reid R. Ashworth, D. V. S.....	Do.
Medical inspection of schools.	J. Frank Butts, LL. B.....	Do.
Food inspection.....	John H. Milligan.....	Do.
Sanitary inspection.....	John B. Reed.....	Do.
Vital statistics.....	John E. Noble.....	Do.
Chemical laboratory.....	Jesse P. Porch.....	Do.
Bacteriological laboratory.....		
Serological laboratory.....		

City	Name of health officer	Official title
Florida:		
Jacksonville.....	*Noble A. Upchurch, M. D.	Health officer.
Key West.....	H. C. Galey, M. D.	City health officer.
Miami.....	*George N. MacDonell, M. D.	Chief division of health.
Orlando.....	Sylvan McElroy, M. D.	City health officer.
Pensacola.....		
St. Petersburg.....		
Tampa.....		
West Palm Beach.....	*Charles William Bartlett, Jr., M. D.	Acting city health officer.
Georgia:	W. E. Van Landingham, M. D.	City health officer.
Albany.....	*Hugo Robinson, Ph. G., M. D.	Commissioner of health.
Athens.....	Thomas H. Johnston, M. D.	Do.
Atlanta.....	*John P. Kennedy, M. D.	City health officer.
Augusta.....	Eugene E. Murphey, M. D.	Health officer.
Brunswick.....	*H. L. Akridge, M. D., Dr. P. H.	Health commissioner.
Columbus.....	R. L. Williams, M. D.	City health officer.
La Grange.....	*S. C. Rutland, M. D.	Health officer.
Macon.....	J. D. Applewhite, M. D.	Do.
Rome.....	*B. V. Elmore, M. D.	Commissioner of health.
Savannah.....	*Victor H. Bassett, M. D.	District commissioner of health.
Valdosta.....		
Waycross.....	*Gordon T. Crozier, M. D., Dr. P. H.	District commissioner of health.
Idaho:	*George E. Atwood, M. D., Dr. P. H.	
Boise.....	*W. H. Rhodes	Health officer.
Pocatello.....	H. H. Hughart, M. D.	City physician.
Twin Falls.....	*David M. Cowgill, M. D.	County health officer.
Illinois:		
Alton.....	O. E. Carson, M. D.	Health officer.
Aurora.....	George W. Haan, M. D.	Health commissioner.
Belleview.....	*Gustav Ehret	Public health officer.
Berwyn.....	*Preston E. Wright, M. D.	Health director.
Bloomington.....	H. H. Bishop, M. D.	Do.
Blue Island.....	*L. A. Burkhart	Health commissioner.
Cairo.....	C. L. Weber, M. D.	Health officer and city physician.
Canton.....	C. J. Johnston, M. D.	City physician.
Centralia.....	G. N. Welch, M. D.	Health officer.
Champaign.....	W. E. Schowengerdt, M. D.	City health officer.
Chicago.....	*Arnold H. Kegel, M. D.	Commissioner of health.
	G. Koehler, M. D.	Assistant health commissioner.
	H. O. Jones, M. D.	Do.
	Alton S. Pope, M. D.	Chief of bureau.
Bureau of communicable diseases.....		
Bureau of child welfare.....	Henry C. Niblack, M. D.	Do.
Bureau of dental hygiene.....	Lon W. Morrey, D. D. S.	Do.
Bureau of laboratories and research.....	F. O. Tonney, M. D.	Do.
Bureau of hospitals.....	Archibald L. Hoyne, M. D.	Do.
Bureau of sanitary engineering.....	Joel I. Connolly	Do.
Bureau of vital statistics.....	M. O. Heckard, M. D.	Do.
Bureau of dairy products.....	Henry C. Becker, M. D. V.	Do.
Bureau of food inspection.....	J. P. Kilcourse	Do.
Bureau of inspection service.....	J. M. Murphy, M. D.	Do.
Chicago Heights.....	Arthur H. Pannenborg, M. D.	Health officer.
Cicero.....	J. J. Hood, M. D.	Health commissioner.
Collinsville.....		Do.
Danville.....	W. C. Dixon, M. D.	Director of public health.
Decatur.....	*Charles Raimer Smith, M. D.	Health commissioner.
East Moline.....	J. Henry Fowler, M. D.	Commissioner of health.
East St. Louis.....	*Albert P. Laumann	Health officer.
Elgin.....	*George H. Reber	Commissioner of health.
Evanston.....	*John W. H. Pollard, B. L., M. D.	Do.
Forest Park.....	William C. Masslow, M. D.	Do.
Freesport.....	E. L. Motsinger, M. D.	Do.
Galesburg.....	E. D. Wing, M. D.	Do.
Granite City.....	L. D. Darner, M. D.	Do.
Harvey.....	M. R. Morse, M. D.	Health officer.
Herrin.....	Kleo Pearce	President board of health.
Jacksonville.....		
Joliet.....	*Ed. J. Higgins, M. D.	Commissioner of health.
Kankakee.....	C. K. Smith, M. D.	Health officer.
Kewanee.....	H. N. Boglin, M. D.	Commissioner of health.
La Salle.....	*Arlington Ailes, M. D., C. P. H.	Do.
Lincoln.....	*Wilbur Montgomery	Health officer.
Marion.....	W. Edw. Reid, M. D.	City physician.
Mattoon.....		
Maywood.....	S. W. Coffman, M. D.	Health commissioner.
Moline.....	E. A. Edien, M. D.	City physician.
Mount Vernon.....	George O. Culli, M. D.	Do.
Murphysboro.....	Louis R. Wayman, M. D.	Do.

November 15, 1929

City	Name of health officer	Official title
Illinois—Continued.		
Oak Park	Frank S. Needham, M. D.	Commissioner of health.
Ottawa	Paul G. Porneray, M. D.	Health officer.
Pekin	Lawrence R. Clary, M. D.	Do.
Peoria		
Quincy	Thomas W. Rhodes, Ph. G., M. D.	Public health officer.
Rock Island	Ralph Dart, M. D.	City physician.
Rockford	*N. O. Gunderson, M. D.	Commissioner of health.
Springfield	H. H. Tuttle, M. D.	Superintendent of health.
Streator	D. S. Conley, M. D.	City physician.
Urbana	George F. Way, M. D.	Health officer.
Waukegan	Howard C. Hoag, M. D.	City health physician.
West Frankfort	C. E. Koons, M. D.	City health officer
Indiana:		
Anderson	E. M. Conrad, M. D.	Secretary city board of health.
Bloomington	J. E. Moser, M. D.	Do.
Clinton	J. H. Clark, M. D.	Do.
Connersville	Thomas Z. Ball, M. D.	City health officer.
Crawfordsville	Milton A. Given, M. D.	Secretary board of health.
East Chicago	Allen A. Norris, M. D.	Do.
Elkhart	Harry W. Fitzpatrick, M. D.	Secretary, health department.
Elwood	William E. Barnes, M. D.	Secretary, board of health.
Evansville	D. R. Benninghoff, M. D.	Do.
Fort Wayne	B. W. Harris, M. D.	Do.
Frankfort	William A. Buchanan, M. D.	Do.
Gary	R. F. Frost, M. D.	Do.
Hammond	*H. G. Morgan, M. D.	Health commissioner.
Huntington	*Davis L. Field, M. D.	Secretary board of health.
Indianapolis	T. C. Cochran, M. D.	Health officer.
Jeffersonville	Earl Van Reed, M. D.	Secretary board of health.
Kokoma	Charles B. Danrather, M. D.	Health commissioner.
La Fayette	Fred G. Six	Health inspector.
La Porte	John F. Loomis, M. D.	Secretary city board of health.
Logansport	Nelle C. Reed, M. D.	Health officer.
Marion	B. J. Wyland, M. D.	Secretary board of health.
Michigan City	Earle S. Green, M. D.	Do.
Mishawaka	Henry B. Shacklett, M. D.	Do.
Munice	Clyde C. Butler, M. D.	Do.
New Albany	Omer U. Carl, M. D.	Health officer.
Newcastle	Richard Schillinger, M. D.	Secretary board of health.
Peru	J. B. Berteling, M. D.	Do.
Richmond	Paul J. Bronson, M. D.	Do.
South Bend	Robert G. Moore, M. D.	Do.
Terre Haute	Perry G. Moore, M. D.	City health officer.
Vincennes	Michael Elmer Rafael, M. D.	Do.
Whiting		
Iowa:		
Boone	William Woodburn, M. D.	Health officer.
Burlington	George H. Steinle, M. D.	Do.
Cedar Rapids	V. H. Hasak, M. D.	Do.
Clinton	Frank A. Hohenschuh, M. D.	Health officer and city physician.
Council Bluffs	Albert Danielsen, M. D.	Health officer.
Davenport	Theodore J. Meyer	Do.
Des Moines	*Adolph J. Lieber, M. D.	Health commissioner.
Dubuque	W. J. Connell, Ph. D., M. D.	Health officer.
Fort Dodge	James P. Sharon, M. D.	City physician.
Fort Madison	Harold F. Noble, M. D.	Do.
Iowa City	Francis L. Love, M. D.	Health officer.
Keokuk	C. A. Dimond, M. D.	City physician.
Marshalltown	Channing E. Dakin, M. D.	Director department of health and sanitation.
Mason City	Rodney M. Arey, M. D.	City health physician.
Muscatine	F. A. Hecker, M. D.	Public health officer.
Ottumwa	*Frank H. Collins	Commissioner of public health.
Sioux City	J. R. Thompson, M. D.	City health officer.
Waterloo		
Kansas:		
Arkansas City	E. W. Hellweg, M. D.	City physician.
Atchison	Charles W. Robinson, M. D.	City health officer.
Chanute	James A. Butin, M. D.	Do.
Coffeyville	Adolph Boese, M. D.	City physician and health officer.
Eldorado	R. J. Cabeen, M. D.	County health officer.
Emporia	*J. S. Fulton, M. D.	Field agent, United States Public Health Service.
Fort Scott	C. L. Mosley, M. D.	City health officer.
Hutchinson	G. R. Walker, M. D.	City physician.
Independence		
Kansas City	*S. D. Henry, M. D.	Director of health.
Lawrence	E. R. Keith, M. D.	City health officer.
Leavenworth	A. L. Suwalsky, M. D.	City physician.
Newton	F. S. Bartel, M. D.	County health officer.
Parsons	M. C. Ruble, M. D.	City health officer.
Pittsburg	H. J. Veatch, M. D.	Do.
Salina	S. T. Blades, M. D.	Health officer.
Topeka	*Joseph H. Kinnaman, M. D.	City health officer.
Wichita	J. E. Wolfe, M. D.	Director of public welfare.

City	Name of health officer	Official title
Kentucky:		
Ashland	James P. Riffe, M. D.	City health officer.
Covington	*Edwin Cameron, M. D., C. M.	Director county health department.
Henderson	C. H. Harris, M. D.	Health officer.
Lexington	*Charles Howard Voorhies, M. D.	Do.
Louisville	John Todd, M. D.	City health officer.
Newport	*Samuel E. Hainline, Ph. G., M. D.	Director of health.
Owensboro	H. P. Linn, M. D.	City health officer.
Paducah	J. A. Packer, M. D.	President board of health.
Louisiana:	T. Jeff McHugh, M. D.	City health officer.
Alexandria	J. G. Martin, M. D.	Do.
Baton Rouge	*John W. Williams, M. D., C. P. H.	Parish health officer.
Lake Charles	*William Henry Robin, M. D.	Superintendent of public health.
Monroe	*A. G. Heath, M. D.	President board of health.
New Orleans		
Shreveport		
Maine:		
Auburn	*L. J. Dumont, M. D.	Health officer.
Augusta	George A. Coombs, M. D.	Do.
Bangor	*H. D. McNeill, M. D.	Do.
Bath	*Chester S. Kingsley	City sanitarian.
Biddeford	John W. Mahoney	Health officer.
Lewiston	*L. J. Dumont, M. D.	Do.
Portland	Thomas Tetreau, M. D.	Do.
Sanford	*William H. Kelly, M. D.	Do.
South Portland	Philip H. McCrum, M. D.	Do.
Waterville	*Arthur R. Daviau, M. D.	Do.
Westbrook	P. H. Welch	Do.
Maryland:		
Annapolis	Joseph C. Joyce, M. D.	City physician.
Baltimore	*C. Hampson Jones, M. D.	Commissioner of health and registrar of vital statistics.
Bureau of bacteriology	J. Frederick Hempel, M. D.	Deputy health officer.
Bureau of chemistry and food.	William Royal Stokes, M. D.	Director.
Bureau of meat inspection.	R. S. Craig	Do.
Bureau of communicable diseases.	William Brenner, M. D.	Do.
Bureau of sanitation	J. Frederick Hempel, M. D.	Do.
Bureau of nursing	Mrs. J. B. Laib	Do.
Bureau of child welfare	William H. F. Warthen, M. D.	Do.
Bureau of vital statistics	Howard A. Moore	Do.
Bureau of hospitals	Myron G. Tull, M. D.	Do.
Cumberland	*Harvey H. Weiss, B. S., bacteriology.	Health officer and registrar of vital statistics.
Frederick	*Elmer C. Kefauver, M. D.	Assistant deputy State health officer.
Hagerstown	Ernest F. Poole, M. D.	County health officer.
Massachusetts:		
Adams	*L. French, M. D., Pittsfield	District health officer.
Amesbury	C. S. Morse	Agent board of health.
Arlington	*William H. Bradley	Do.
Athol	Marion B. Sibley, M. D.	Secretary board of health.
Attleboro	William O. Hewitt, M. D.	Health officer.
Belmont	Thomas F. Harris	Do.
Beverly	*Alonzo O. Woodbury	Agent board of health.
Boston	*Francis X. Mahoney, D. V. M., M. D.	Health commissioner.
Divisions—		
Medical	M. Victor Safford, M. D.	Director.
Communicable diseases	Frederick J. Bailey, M. D.	Do.
Bacteriological laboratory.	Karl R. Bailey, M. D.	Do.
Food	P. H. Mullowney, M. D.	Do.
Child hygiene	Charles F. Willinsky, M. D.	Do.
Sanitary	Thomas J. Donnellon	Do.
Tuberculosis	George O'Donnell, M. D.	Do.
Braintree	Harry F. Vinton	Agent, board of health.
Brockton	Joseph H. Lawrence, M. D.	Health officer.
Brookline	Francis P. Denny, M. D.	Do.
Cambridge	Simon B. Kelleher, M. D.	Medical inspector.
Chelsea	*John F. Welch	Health officer.
Chicopee	*Gertrude N. De Witt	Agent board of health.
Clinton	*Frederick E. Murphy	Do.
Danvers	Hugo Nappe, R. N.	Health officer.
Dedham	Thomas P. Brennan	Inspector of health.
Easthampton	Clemence C. Buckner	Agent board of health.
Everett	*William F. Hogan	Do.
Fall River	*Ernest M. Morris, M. D., C. M.	Health commissioner.

November 15, 1929

City	Name of health officer	Official title
Massachusetts—Continued.		
Fitchburg	Fred R. Brigham	Agent board of health.
Framingham	David Moxon, C. P. H.	Do.
Gardiner	William P. O'Donnell	Do.
Gloucester	George S. Rust, M. D.	Physician to board of health.
Greenfield	George P. Moore	Agent board of health.
Holyoke	George T. Lennon	Do.
Lawrence	Daniel D. Mahoney	Chairman board of health.
Leominster	Aime D. V. Bourget	Agent board of health.
Lowell	Hugh E. Crain	Do.
Lynn	Francis J. O'Hare	Commissioner of public health.
Malden	William T. Hopkins, M. D.	Health inspector.
Marlboro	Frederick Walmsley	Agent board of health.
Medford	John J. Cassidy	Health inspector.
Melrose	John J. Carew	Chairman board of health.
Methuen	Clarence P. Holden, M. D.	Clerk board of health.
Miltord	Albert Slack	Secretary board of health.
Milton	Oscar C. Ayotte	Agent board of health.
Natick	Paul W. Kimball	Do.
New Bedford	T. F. Morris	Agent and executive officer.
Newburyport	William G. Kirschbaum	Agent board of health.
Newton	W. N. O'Brien, Ph. G.	Chairman board of health.
North Adams	Francis George Curtis, M. D.	Agent board of health.
Northampton	Douglas W. Hyde, S. E.	Do.
Northbridge	George R. Turner	Chairman board of health.
Norwood	Daniel C. Duggan	Agent board of health.
Palmer	James J. Mulvehill	Chairman board of health.
Peabody	J. P. Schneider, M. D.	Agent board of health.
Pittsfield	Percy F. Murray	Chairman board of health.
Plymouth	Willys M. Monroe, M. D.	Agent board of health.
Quincy	William E. Curtin, M. D.	Chairman board of health.
Revere	Edmund B. Fitzgerald, M. D.	Agent board of health.
Salem	Francis Licata, M. D.	Do.
Saugus	John J. McGrath	Health commissioner.
Somerville	Charles E. Light	Chairman board of health.
Southbridge	Frank L. Morse, M. D.	Medical inspector and bacteriologist.
Springfield	Albert R. Brown	Agent board of health.
Taunton	Jacob B. Sackett	Do.
Wakefield	William H. Bennett, M. D.	Chairman board of health.
Waltham	David Taggart	Health officer.
Watertown	C. B. Fuller, M. D.	Director, public welfare commission.
Webster	Arthur E. Burke	Health officer.
West Springfield	Bernard L. Plouffe, M. D.	City physician.
Westfield	J. J. Lysaght	Health officer.
Weymouth	Robert M. Marr, M. D.	Health officer and registrar.
Winchester	F. L. Doneett, M. D.	Health officer.
Winthrop	Maurice Dineen	Do.
Woburn	William D. Childress	Do.
Worcester	Edward T. Gorman	Agent and secretary.
Michigan:	Thomas F. Kenney, M. D.	Director of health and school hygiene.
Adrian	J. P. Bland, M. D.	Health officer.
Alpena	D. A. Cameron, M. D.	City physician.
Ann Arbor	John A. Wessinger, M. D.	Health officer.
Battle Creek	A. A. Hoyt, M. D.	Health officer and registrar.
Bay City	G. W. Moore, M. D.	Health officer.
Benton Harbor	Edwin R. Taylor, M. D.	Director of public health.
Cadillac	Sair C. Moore, M. D.	County health commissioner.
Detroit	Board of Health—	President.
	Hugo A. Freund, M. D.	Vice President.
	Gustavus D. Pope	
	William H. Maybury	
	William A. Evans, M. D.	
	Executive staff, department of health—	
	Henry F. Vaughan, D. P. H.	Commissioner of health.
	Bert U. Estarbrook, M. D.	Deputy commissioner.
	Fred M. Meader, M. D.	Deputy commissioner and director of medical service.
	Carl E. Buck, D. P. H.	Deputy commissioner and executive officer.
	John F. Norton, Ph. D.	Director of laboratories.
	A. C. Thompson, D. D. S.	Director of school dental service.
	Miss Grace Ross, R. N.	Superintendent of nursing.
	Ward F. Seeley, M. D.	Director of Herman Klefer Hospital maternity division.
	Russell W. Alles, M. D.	Director prenatal division.
	Maj. John F. Roehl	Director of special investigation.
	R. S. Dixon, M. D.	Director of division of venereal diseases.
	Henry D. Chadwick, M. D.	Tuberculosis controller.

City	Name of health officer	Official title
Michigan—Continued. Detroit—Continued.	Executive staff, department of health—Continued. B. H. Douglas, M. D..... George E. Phillips..... F. Gardner Legg, C. E..... Edward C. Schultz..... A. M. Wehenkel, M. D..... Don W. Gudakunst, M. D..... Don J. Barnes, M. D..... F. B. Broderick, M. D..... G. Arthur Blakeslee..... Harry J. Defnet, M. D..... C. V. Merritt, M. D..... C. C. Siemons, M. D. Charles Reynolds Sheridan, M. D. William N. Braley, M. D. William Westrate, M. D. Louis Dorpat, M. D. George G. Barnett, M. D. Floyd R. Town, M. D. Alvin H. Rockwell, M. D. S. Rowland Hill, M. D. T. R. Laughbaum, M. D. W. J. Kane, M. D. R. J. Harrington, M. D. William S. Chapin, M. D. R. Wallace Teed, M. D. C. A. Neafe, M. D., M. S. P. H. A. L. Callery, M. D. Claude Smith, M. D. William Henry Pickett, M. D., C. P. H. J. J. Griffin, M. D. George A. Holliday, D. D. S., M. D. Arthur Paul Schulz, M. D. Donald S. Branham, M. D. Charles C. Allen, M. D. J. A. Thabes, Jr., M. D. Lincoln A. Sukeforth, M. D. Frederick U. Davis, M. D. Theo. A. Estrem, M. D. J. A. Butzer, M. D. Francis Edward Harrington, LL. D. M. D. C. H. Mayo, M. D. J. N. Libert, M. D. Benjamin Franklin Simon, M. D. Robert P. Pear soll, M. D. William V. Lindsay, M. D. George F. Carroll, M. D. William L. Stallworth, M. D. H. P. Rankin, M. D. W. D. Beacham, M. D. W. E. Noblin, M. D. Hardie Rogers Hays, M. D., C. P. H. J. T. Googe, M. D. L. Wallin, M. D. Robert Wilson.... Ephraim D. Hatcher, M. D.... W. A. Norris, M. D.... E. M. Lucke, M. D.... F. L. Cook, M. D.... William A. Clark, M. D.... Superintendent of William H. Maybury Sanatorium. Superintendent of Herman Klefer Hospital. Director of sanitary engineering. Director of dairy and food inspec- tion. Director of division of tubercu- losis. Director of division of school health service. Director of division of child wel- fare. Director of division of hairdress- ers and cosmeticians. Director of division of vital statistics. Commissioner of health. Health officer and registrar. Health officer. Commissioner of health. Health officer. Do. Do. City health officer. Health officer. Do. Health director. Do. Health officer. Do. Health director. Director of public health. Health officer. Do. Do. City health officer. Health officer. Commissioner of health and sanitation. Health officer. Do. Do. Director of public health. Health commissioner. Health officer. Do. Commissioner of health. Health officer. City physician. Health officer. Do. Do. City health officer. Do. Director county health depart- ment. Do. County health officer. Do. Director county health depart- ment. Do. Health officer. City physician. City health commissioner. Field agent, United States Public Health Service. City physician. Do.	Superintendent of William H. Maybury Sanatorium. Superintendent of Herman Klefer Hospital. Director of sanitary engineering. Director of dairy and food inspec- tion. Director of division of tubercu- losis. Director of division of school health service. Director of division of child wel- fare. Director of division of hairdress- ers and cosmeticians. Director of division of vital statistics. Commissioner of health. Health officer and registrar. Health officer. Commissioner of health. Health officer. Do. Do. City health officer. Health officer. Do. Health director. Do. Health officer. Do. Do. Health director. Director of public health. Health officer. Do. Do. City health officer. Health officer. Commissioner of health and sanitation. Health officer. Do. Do. Director of public health. Health commissioner. Health officer. Do. Commissioner of health. Health officer. City physician. Health officer. Do. Do. City health officer. Do. Director county health depart- ment. Do. County health officer. Do. Director county health depart- ment. Do. Health officer. City physician. City health commissioner. Field agent, United States Public Health Service. City physician. Do.
Minnesota:		
Albert Lea..... Austin..... Brainerd..... Duluth..... Faribault..... Hibbing..... Mankato..... Minneapolis..... Rochester..... St. Cloud..... St. Paul..... Virginia..... Winona.....		
Mississippi:		
Biloxi..... Columbus..... Greenville..... Hattiesburg..... Jackson..... Laurel..... Meridian..... Natchez..... Vicksburg.....		
Missouri:		
Cape Girardeau..... Carthage..... Columbia..... Hannibal..... Independence..... Jefferson City.....		

† Full-time deputy health officer, D. C. Lockheed, M. D., D. P. H.

November 15, 1929

City	Name of health officer	Official title
Missouri—Continued.		
Joplin	*M. B. Harutun, M. D.	Commissioner of health and sanitation.
Kansas City	*Calvin L. Cooper, M. D.	Director of health.
Moberly	J. Maddox, M. D.	Health commissioner.
St. Joseph	William Wallace Gray, M. D.	Health officer.
St. Louis	*Max C. Starkloff, M. D.	Health commissioner.
Sanitary section	Max Kaufman	Deputy health officer.
Vital statistics section	Walter Cook	Director.
Dental section	Leon Grosch	Do.
Chemical-bacteriological section	Dr. Barbard Towles	Chief chemist.
Communicable disease section	Thomas Buckland	Chief bacteriologist.
General disease section	Dr. J. C. Willett	Director.
Municipal visiting nurses	Dr. J. A. Smith	
Tuberculosis controller		
Sedalia	Dr. Eugene Brown	Chief physician.
Springfield	Mrs. Bertha Yonieck	Director.
Webster Groves	Dr. Howard Dell	Do.
Montana:	Alpheus L. Pollard, M. D.	City physician.
Anaconda	*Lon Sharp	Commissioner of health and sanitation.
Billings	Carl C. Irick, M. D.	Health commissioner.
Butte	J. L. O'Rourke, M. D.	City health officer.
Great Falls	Albert E. Stripp, M. D.	Do.
Helena	Joseph J. Kane, M. D.	City physician.
Missoula	*Thomas F. Walker, M. D.	Health officer.
Nebraska:	*Arthur Jordan, M. D.	Field agent, United States Public Health Service.
Grand Island	*F. D. Pease, M. D.	Health officer.
Lincoln	J. G. Woodin, M. D.	City physician.
North Platte	M. F. Arnhold, M. D.	Superintendent of health.
Omaha	J. B. Redfield, M. D.	City physician.
Nevada:	A. S. Pinto, M. D.	Health commissioner.
Reno	Albert Franklin Adams, Ph. G., M. D.	City health officer.
New Hampshire:		
Berlin	*Eli A. Marcoux, B. S. in Ch. E.	Health officer and milk inspector.
Claremont	William P. Prescott	Health officer.
Concord	*Charles E. Palmer	Sanitary officer.
Dover	*William E. Whiteley	Executive officer.
Keene	Fred C. Nims	Health officer.
Laconia	Richard W. Robinson, M. D.	Secretary board of health.
Manchester	*Howard A. Streeter, M. D.	Health officer.
Nashua	Eugene Hyslette	Do.
Portsmouth	John D. Carty, M. D.	Sanitary inspector and bacteriologist.
Rochester	Charles E. Goodwin	Health officer.
New Jersey:		
Asbury Park	*Budd H. Ober	Health officer and registrar of vital statistics.
Atlantic City	Samuel L. Salasin, M. D.	Health officer.
Bayonne	William W. Brooke, M. D.	Do.
Bellville	*Eugene T. Berry	Do.
Bloomfield	*Joseph C. Sale, Ph. G., D. V. S., D. O.	Do.
Bridgeton	*Charles E. Bellows, Ph. G.	Sanitary inspector.
Camden	*Arthur L. Stone, M. D.	Director of public health.
Clifton	Jeremiah P. Quinlan	Health officer.
Collingswood	Ralph Wright, M. D.	Medical inspector.
Dover	*John G. Taylor	Health officer.
East Orange	*Frank J. Osborne	Health officer and secretary.
Elizabeth	Louis J. Richards, S. B. in S. E.	Health officer.
Englewood	*John A. Manson	Sanitary inspector.
Garfield	Charles B. Bleasby, M. D.	Health officer.
Gloucester	J. Alonzo Beek, M. D.	Do.
Hackensack	*L. Van D. Chandler	Do.
Harrison	John T. McClure	Do.
Hoboken	J. F. X. Stack, M. D.	Health commissioner.
Irvington	*William S. Bailey	Acting health officer.
Jersey City	*Dennis J. Sullivan	Health officer.
Kearny	*Amos Field, Jr.	Do.
Lodi	Henry H. Brevoort, M. D.	Health inspector.
Long Branch	*R. Clifford Erickson	Health officer.
Millville	James S. Knowles, M. D.	Acting health officer.
Montclair	*Carl T. Pomeroy, C. P. H.	Health officer.
Morristown	*John F. Kilkenny	Health officer.
New Brunswick	E. Irving Cronk, M. D.	Do.
Newark	*Charles V. Craster, M. D. D. P. H.	Do.
Nutley		

City	Name of health officer	Official title
New Jersey—Continued. Orange.....	*Mrs. Lenore Y. Wylie, R. N.....	Health officer and registrar of vital statistics.
Passaic.....	John N. Ryan, M. D.....	Health officer.
Paterson.....	*Frederick P. Lee, M. D.....	Do.
Perth Amboy.....	*Charles S. Thompson, D. V. S.....	Do.
Phillipsburg.....	Alma L. Williston, M. D.....	Town physician.
Plainfield.....	N. J. Randolph Chandler.....	Health officer.
Rahway.....	*Fred M. Williams.....	Do.
Ridgefield Park.....	*William F. Reynolds, D. V. M.....	Do.
Rutherford.....	*Marine Dunn.....	Sanitary inspector.
Summit.....	Henry Paul Dengler, M. D.....	Health officer.
Trenton.....	*Alton S. Fell, M. D. M. D.....	Do.
Union City.....	Grant P. Curtis, M. D.....	Town physician.
Weehawken.....	Jacob M. Stein, M. D.....	Chief inspector.
West New York.....	*Rudolph Kunze.....	Health officer and registrar.
West Orange.....	*David E. Buckley.....	Executive officer.
Westfield.....	*Andrew Carney.....	County health officer.
New Mexico: Albuquerque.....	*James R. Scott, Ph. D., M. D.	
New York: Albany.....	James W. Wiltse, M. D.....	Health officer.
Amsterdam.....	Julius Schiller, M. D.....	Do.
Auburn.....	Thomas C. Sawyer, M. D.....	Do.
Batavia.....	E. F. Will, M. D.....	Do.
Beacon.....	Charles B. Dugan, Ph. B., M. D.....	Do.
Binghamton.....	Chalmers J. Longstreet, M. D.....	Do.
Buffalo.....	*Francis E. Froneczak, LL. D., M. D., Dr. Sc. P. H.....	Health commissioner.
Division of child hygiene.....	Edward Durney, M. D.....	Deputy health officer.
Communicable disease and division of laboratories.....	Charles A. Bentz, M. D.....	Do.
Division of vital statistics.....	Edward Durney, M. D.....	Director.
Division of sanitation.....	Charles A. Bentz, M. D.....	Do.
Division of food and drugs.....	J. N. Kiefer, M. D.....	Registrar.
Hygiene education.....	Frank Smering.....	Superintendent.
Cohoes.....	Stephen Bateson.....	Do.
Corning.....	Edmund Mackey.....	Director.
Cortland.....	E. M. Bell, M. D.....	Health officer.
Dunkirk.....	Henry E. Elwood, Jr., M. D.....	Do.
Elmira.....	A. C. Knapp, M. D.....	Do.
Endicott.....	George E. Ellis, M. D.....	Do.
Freeport.....	Reeve B. Howland, M. D.....	Do.
Fulton.....	D. W. Hardy, M. D.....	Do.
Geneva.....	William H. Runcie, M. D.....	Do.
Glens Falls.....	C. W. Grove, M. D.....	Do.
Gloversville.....	Alex L. Johnson, M. D.....	Do.
Herkimer.....	James W. Graves, M. D.....	Do.
Hornell.....	G. E. Taylor, M. D.....	Do.
Hudson.....	Frank B. Conterman, M. D.....	Do.
Ilion.....	L. T. Genung, M. D.....	Health officer and school physician.
Ithaca.....		
Jamestown.....	William M. Sill, M. D.....	Superintendent of health.
Johnson City.....	Rollin O. Crosier, M. D.....	Health officer.
Johnstown.....	Guy Vail Wilson, M. D.....	Do.
Kingston.....	Lester E. Sanford, M. D.....	Do.
Lackawanna.....	A. S. Culkowski, M. D.....	Do.
Little Falls.....	George S. Eveleth, M. D.....	Do.
Lockport.....	T. Edwin O'Brien, M. D.....	Do.
Middletown.....	H. J. Shelley, M. D.....	Do.
Mount Vernon.....	Frank W. Shipman, M. D.....	Commissioner of health.
New Rochelle.....	*Shirley W. Wynne, M. D., Dr. P. H.	Do.
New York.....	Herman T. Peck, M. D.....	Deputy health officer.
Bureau—	Bernard F. Plunkett.....	Director.
General administration.....	William H. Guilfoyle, M. D.....	Do.
Records.....	William H. Pound, M. D.....	Do.
Sanitation.....	Edward L. Creedon, M. D.....	Acting director.
Preventable diseases.....	Jules L. Blumenthal, M. D.....	Director.
Child hygiene.....	Miss Amelia H. Grant.....	Do.
Nursing.....	Charles F. Bolduan, M. D.....	Do.
Public health education.....	William H. Park, M. D.....	Do.
Laboratories.....	Thomas J. Burke, M. D.....	Health officer.
Newburgh.....	Edward E. Gillick, M. D.....	Do.
Niagara Falls.....	Henry C. Lapp, M. D.....	Do.
North Tonawanda.....	John W. Benton, M. D.....	Do.
Ogdensburg.....	John A. Johnson, M. D.....	Health commissioner.

November 15, 1929

City	Name of health officer	Official title
New York—Continued.		
Oneida	Donald H. Conterman, M. D.	Health officer.
Oneonta	Robert R. Bloom, Ch. B., M. D.	Do.
Ossining	Harvey S. Albertson, M. D.	Do.
Oswego	Fred A. Snowden, M. D.	Do.
Peekskill	W. J. Shuehan, M. D.	Do.
Port Chester	G. Otto Pobe, M. D.	Do.
Port Jervis	*William H. Conger, M. D.	Do.
Poughkeepsie	James C. Shakay, M. D.	Do.
Rensselaer	*George W. Goler, M. D.	Do.
Rochester	Lewis N. Eames, M. D.	Do.
Rome	Charles B. Small, M. D.	Do.
Salamanca	J. H. Collins, M. D.	Commissioner of health.
Saratoga Springs	*George C. Ruhland, M. D.	Do.
Schenectady	John T. Harris, M. D.	Health officer.
Syracuse	James H. Flynn, M. D.	Commissioner of health.
Tonawanda	Hugh H. Shaw, M. D.	Health officer.
Troy	George B. Van Doren, M. D.	Do.
Utica	Charles A. Birmingham, M. D., C. M.	Commissioner of health.
Watertown	Edwin G. Ramsdell, M. D.	Health officer.
Watervliet	Clarence W. Buckmaster, M. D., C. P. H.	Commissioner of health.
White Plains		
Yonkers		
North Carolina:		
Asheville	*D. E. Sevier, M. D.	Health officer.
Charlotte	*Wilbur Ashley McPhail, M. D.	City-county health officer.
Concord	*D. G. Caldwell, M. D.	County health officer.
Durham	*J. H. Epperson, M. S., bacteriologist.	Superintendent of health.
Gastonia	McTyre G. Anders, M. D.	City physician.
Goldsboro	*Lacy W. Corbett, M. D.	Health officer.
Greensboro	*C. Curtis Hudson, M. D.	Do.
High Point	S. S. Coe, M. D.	City physician.
Kinston	*Robert Sherwood McGeechy, M. D.	Health officer.
New Bern	*D. E. Ford, M. D.	County health officer.
Raleigh	*A. C. Bulla, M. D.	Health officer.
Rocky Mount	*H. Lee Large, M. D.	Superintendent department of health.
Salisbury	*Charles Wallace Armstrong, M. D.	City and county health officer.
Wilmington	*John H. Hamilton, M. D.	County health officer.
Wilson	*L. J. Smith, M. D.	Health officer.
Winston-Salem	*R. L. Carlton, M. D.	City health officer.
North Dakota:		
Fargo	*B. K. Kilbourne, M. D.	Do.
Grand Forks	F. E. Wheeler, M. D.	Do.
Minot		
Ohio:		
Akron	*Melville D. Ailes, LL. B., M. D.	Director of health.
Alliance	Earl Musselman, LL. B., M. D.	Health Commissioner.
Ashland	E. L. Clem, M. D.	Director of public welfare.
Ashtabula	A. J. Pardee, M. D.	Health officer.
Barterton	W. A. Mansfield, M. D.	Health commissioner.
Bellefontaine	Arthur J. McCracken, M. D.	City health commissioner.
Bucyrus	Clyde L. Vorhes, M. D.	Health commissioner.
Cambridge	J. S. Mariner, M. D.	Do.
Campbell	F. M. Sayre, M. D.	Do.
Canton	*R. E. Bower, Ph. B., M. D.	Do.
Chillicothe	*William H. Peters, M. D.	Do.
Cincinnati	*H. L. Rockwood, M. D.	Commissioner of health.
Cleveland		
Division—		
Communicable diseases	T. G. Duncan, M. D.	Director.
Child hygiene	R. J. Ochsner, M. D.	Do.
Food and drug administration	H. J. Knapp, M. D.	Do.
Meat and dairy	R. F. Leslie, D. V. M.	Do.
Cleveland Heights	*Robert Lockhart, M. D.	Director of health.
Columbus	James A. Beer, M. D.	Health commissioner.
Conneaut	Inez Hyatt, M. D.	Do.
Coshocton	*D. M. Criswell, M. D.	Do.
Cuyahoga Falls	*R. H. Markwith, M. D.	Do.
Dayton	*A. O. Peters, M. D.	Do.
East Cleveland	George W. Stober, M. D.	Director of health.
East Liverpool	Edward W. Miskall, M. D.	Health commissioner.
Elyria	G. E. French, M. D.	Do.
Findlay	*K. B. Clark	Do.
Fostoria	*A. V. Parsel	Do.
Fremont	E. L. Vermilyea, M. D.	Do.
Hamilton	*C. J. Baldridge, B. L. M. D.	Do.

City	Name of health officer	Official title
Ohio—Continued.		
Ironton	Ralph F. Massie, M. D.	Health commissioner.
Lakewood	Wallace J. Benner, M. D.	Do.
Lancaster	Clifford B. Snider, M. D.	Do.
Lima	James B. Poling, M. D.	Do.
Lorain	Valleyard Adair, M. D.	Do.
Mansfield	Theodore R. Meyer, M. D.	Do.
Marietta	J. B. McClure, M. D.	Do.
Marion	*C. M. Tobin	Do.
Martins Ferry	John Donovan	Sanitary commissioner.
Massillon	*John H. Williams	Health commissioner.
Middletown	*G. D. Lummis, M. D.	Do.
New Philadelphia	Joseph Blickensderfer, M. D.	Do.
Newark	W. H. Knauss, M. D.	Do.
Niles	W. A. Werner, M. D.	Do.
Norwood	L. O. Saur, M. D.	Do.
Piqua	J. G. Freshour, M. D.	Do.
Portsmouth		
Salem	Thomas Teasdale Church, M. D.	Do.
Sandusky	*F. M. Houghtaling, M. D.	Do.
Springfield	Howard C. Lisle, Ph. G. M. D.	Health director.
Steubenville	Julius A. Pizzoferrato	Health commissioner.
Tiffin	J. A. Gosling, M. D.	Do.
Toledo	*Paul F. Orr, M. D.	Do.
Warren	M. T. Knappenberger, M. D.	Do.
Youngstown	H. E. Welch, M. D.	Commissioner of health and welfare.
Zanesville	D. J. Evans, M. D.	Superintendent of health and sanitation.
Oklahoma:		
Ardmore	A. Y. Easterwood M. D.	City health officer.
Bartlesville	Elizabeth Chamberlin, M. D.	City superintendent of health.
Chickasha	H. C. Antle, M. D.	Do.
Enid	R. C. Baker, M. D.	Do.
Guthrie	William C. Miller, M. D.	City health officer and physician.
McAlester	*Charles M. Pearce, M. D.	Superintendent of health.
Muskogee	I. C. Wolfe, M. D.	City health officer.
Oklahoma City	*Walter H. Miles, M. D.	Director of health.
Okmulgee	L. B. Torrance, M. D.	City physician.
Sapulpa	P. K. Lewis, M. D.	Superintendent of health.
Shawnee	T. C. Sanders, M. D.	City superintendent of health.
Tulsa		
Oregon:		
Astoria	Nellie S. Vernon, M. D.	County and city health officer.
Eugene	Seth M. Kerron, M. D.	City health officer.
Portland	*John G. Abele, M. D.	Do.
Salem	Vernon A. Douglas, M. D.	City-county health officer.
Pennsylvania:		
Aliquippa	*James E. Tanner	Health officer.
Allentown	*J. Treichler Butz, D. D. S., M.	Do.
Altoona	D.	Chief, bureau of health.
Ambridge	*T. G. Herbert	Health officer and plumbing in-
Beaver Falls	*Nelson W. Osmond	spector.
Berwick	*Charles E. Ross	Health officer.
Bethlehem	F. J. Conahan, M. D.	City health physician.
Braddock	*James E. Wills	Health officer.
Bradford	*Carl L. Peterson	Do.
Bristol	John M. Wright	Do.
Butler	*J. Fred Leetch	Do.
Canonsburg	*J. Martin Templeton	Do.
Carbondale	*P. J. Sheare	Do.
Carlisle	*John L. Glass	Do.
Carnegie	*Joseph Lewis	Ordinance officer.
Chambersburg	*Frank J. Croft	Health officer and secretary.
Charleroi	*W. M. Darby	Health inspector.
Chester	*Mark G. Murtaugh	Health officer and secretary.
Coatesville	W. F. Connelly	Health officer.
Columbia	Charles V. Peace	Do.
Connellsville	George M. Rodenhauser	Do.
Dickson City	*John Irwin	Sanitary police.
Donora	*Herman Lang	Health officer.
Du Bois	J. I. Brockbank, M. D.	Do.
Dunmore	Anthony Earley	Do.
Duquesne	*Emil Elmgren	Do.
Easton	J. James Condran, M. D.	City health officer.
Ellwood City	*Louis Young	Health officer.
Erie	J. R. Smith, M. D.	Do.
Farrell	*A. R. Maxwell	Do.
Franklin	*T. R. Hunter	Do.
Greensburg	John M. J. Raunick, M. D.	Director of health.
Harrisburg	*Patrick J. Bonner	City health officer.
Hazleton		

November 15, 1920

City	Name of health officer	Official title
Pennsylvania—Continued.		
Homestead	W. E. Lawson, M. D.	President board of health.
Jeanette	*Charles E. Walter	Chief health officer.
Johnstown	L. W. Jones, M. D.	Health officer.
Kingston	*J. F. Seward	Health officer and secretary board of health.
Lancaster	*Benjamin F. Charles	Health officer.
Lansford	James Dale	Do.
Latrobe	W. T. Osborne	Do.
Lebanon	John D. Boger, M. D.	Do.
Lewistown	H. E. Fetterolf	Do.
McKees Rocks		
McKeesport	*Daniel F. Marsh	Do.
Mahanoy City	*Joseph B. Klindienst	Do.
Meadville		
Monessen	*Francis E. Gibson	City health officer.
Mount Carmel	W. F. Stine	Health officer.
Nanticoke	*H. Judd Abbott	City health officer.
New Castle	William L. Steen, M. D.	Health officer.
New Kensington		
Norristown	*Charles E. White	Do.
North Braddock	*George A. Shepherd	Do.
Oil City	*William J. Lewis	Do.
Old Forge		
Olyphant	Frank Gillar	Do.
Philadelphia	*A. A. Cairns, M. D.	Director department of public health.
	Michael C. Goglia	Assistant director department of public health.
Division of health		
Bureau of hospitals	William J. Wolf	Secretary.
Philadelphia General Hospital, Thirty-Fourth and Pine Streets.	William J. McAllister	Superintendent.
Philadelphia Hospital for Contagious Diseases, Second and Luzerne Streets.		
Philadelphia Hospital for Mental Diseases, Byberry.		
Phoenixville	Alien L. Bevan	Health officer.
Pittsburgh	*Charles B. Maitz, M. D.	Director department of public health.
	P. E. Marks, M. D.	Superintendent.
Bureau of infectious diseases (including municipal and tuberculosis hospitals).		
Bureau of sanitation	Charles Parkinson	Do.
Bureau of child welfare	H. J. Benz, M. D.	Do.
Bureau of food inspection	J. C. McNeil, M. D.	Do.
Bureau of smoke regulation	H. B. Meier, C. E.	Do.
Pittston	*Michael A. McHale	Health officer.
Plymouth	H. G. Templeton, M. D.	Secretary board of health.
Pottstown	*A. John André	Health officer.
Pottsville		
Punxsutawney	Ira J. Hain, M. D.	Do.
Reading	R. R. Schultz, M. D.	Director department of health.
Saranac	*Frederick Zeiser	Health officer.
Shamokin	L. C. Braford	Sanitary officer.
Sharon	*Cyrus Geise	Health officer.
Shenandoah	E. G. Butler	Do.
Steelton	*Victor A. Koble	Do.
Sunbury	*Samuel L. Glasgow	Do.
Swissvale	Lamont Perrine	Do.
Tamaqua	E. E. Edwards, M. D.	Do.
Taylor	A. D. Mercer	Do.
Tyrone	*W. C. Hall	Do.
Uniontown	S. E. Byers	Do.
Vandergrift	R. N. Brown	Do.
Warren	*J. G. Dinsmore	Do.
Washington	Percy H. Snowberger	Do.
Waynesboro	Joseph Scattergood, M. D.	County medical inspector.
West Chester		
Wilkes-Barre	*J. M. Snyder	Health officer.
Wilkinsburg	E. T. Clark	Do.
Williamsburg	R. F. Trainer, M. D.	Do.
Williamsport	S. W. McMullen	Chief of police.
Windber	J. Frank Small, M. D.	Director of public health.
York		

City	Name of health officer	Official title
Rhode Island:		
Bristol	Adolph R. V. Fenwick, M. D.	Superintendent of health.
Central Falls	Daniel S. Latham, M. D.	Superintendent of health and city physician.
Cranston	Stephen A. Kenney, M. D.	Health officer.
Cumberland		
East Providence	Edward V. Murphy, M. D.	Commissioner of health.
Newport	Florian A. Ruest, M. D.	Superintendent of health.
Pawtucket	*Charles Value Chapin, LL. D., M. D.	Superintendent of health and city registrar.
Providence	R. F. Lockwood, M. D.	Health officer.
Warwick		
West Warwick	Samuel C. Webster, Ph. G., M. D.	Superintendent of health.
Westerly	Thomas S. Flynn, M. D.	Health officer.
Woonsocket		
South Carolina:		
Anderson	*E. R. Van De Grift, D. V. M.	Commissioner of health.
Charleston	Leon Bonov, M. D.	Health officer.
Columbia	R. T. Jennings, M. D.	Do.
Florence	*George D. Heath, M. D., Dr. P. H.	Health commissioner.
Greenville	*Irving S. Barksdale, M. D.	Commissioner of health.
Spartanburg		
Sumter	*J. R. Sumter	Health officer.
South Dakota:		
Aberdeen	M. C. Johnston, M. D.	Do.
Sioux Falls	William E. Donahoe, M. D.	Do.
Watertown	H. T. Kenney, M. D.	City health officer.
Tennessee:		
Chattanooga	*Fred C. McIsaac, M. D.	Director of health.
Jackson	Herman Hawkins, M. D.	City physician.
Johnson City	*S. S. Moody, M. D.	City health officer.
Knoxville	*W. H. Enneis, M. D., M. P. H.	Health officer.
Memphis	*Lloyd Myers Graves, M. D.	Superintendent city health department.
Nashville	*John Overton, M. D.	City health officer.
Texas:		
Abilene	Scott W. Hollis, M. D.	City and county health officer.
Amarillo	*H. H. Latson, M. D.	City health officer.
Austin	*Lee E. Edens, M. D.	Director of public health and welfare.
Beaumont	Dru McMickin, M. D.	City health officer.
Brownsville	W. E. Spivey, M. D.	Do.
Cleburne	M. T. Knox, M. D.	Do.
Corpus Christi	Henry Robert Giles, M. D.	Do.
Corsicana		
Dallas	*Lane B. Cooke, M. D.	Director of public health.
Del Rio	B. F. Orr, M. D.	City health officer.
Denison	Arch. G. Sneed, M. D.	Do.
Eastland	E. R. Townsend, M. D.	Do.
El Paso	*P. R. Outlaw, M. D.	Do.
Fort Worth	*Arthur Heath Flickwir, Surgeon, U. S. P. H. S.	Director of public health and welfare.
Galveston	Walter Kleberg, M. D.	City health officer.
Houston	*Allen C. Hutcheson, M. D.	Do.
Laredo		
Marshall	Galen Eads, M. D.	City physician.
Orange	J. E. Reeves, M. D.	City health officer.
Palestine	J. M. Colley, M. D.	Do.
Paris	Davis Scott Hammond, M. D.	Do.
Port Arthur	A. S. Pollock, M. D.	Do.
Ranger	Walter C. Palmer, M. D.	Do.
San Angelo	A. C. De Long, M. D.	Do.
San Antonio	*W. A. King, M. D.	Health officer.
Sherman	A. L. Ridings, M. D.	Do.
Temple		
Texarkana	Wm. Hibbitts, M. D.	City physician.
Tyler	Albert Woldert, Ph. G., M. D.	City health officer.
Waco	T. E. Tabb, M. D.	Do.
Wichita Falls	*H. D. Fillmore, M. D.	Director of health and sanitation.
Utah:		
Logan	N. Henry Savage, M. D.	Health commissioner.
Ogden	Lloyd L. Cullimore, M. D.	City physician.
Provo	W. Christopherson, Ph. G., M. D.	Commissioner of Health.
Salt Lake City		
Vermont:		
Barre	Marshall D. Lamb, M. D.	City health officer.
Bennington	*Joseph M. Ayres	Health officer.
Burlington	*James W. Courtney, M. D.	Do.
Rutland	George Rustedt, M. D.	Do.

November 15, 1929

City	Name of health officer	Official title
Virginia:		
Alexandria	*W. Lewis Schafer, M. D.	Health officer and clinician.
Charlottesville	*G. B. Young, M. D.	Health officer.
Danville	*R. W. Garnett, M. D.	Do.
Lynchburg	*Mosby O. Ferrow, Ph. D.	Director of public welfare.
Newport News	*G. Colbert Tyler, M. D.	Health officer.
Norfolk	*Powhatan S. Schenck, M. D.	Health commissioner.
Petersburg		
Portsmouth	*Lonsdale J. Roper, M. D.	Director of public welfare.
Richmond	*W. Brownley Foster, M. D.	Do.
Roanoke	*Coleman Bernard Ransone, M. D.	Health officer.
Staunton	J. F. Fulton, M. D.	Do.
Suffolk	*Challis H. Dawson, M. D.	Director of public health.
Washington:		
Aberdeen	B. O. Swinehart, M. D.	City health officer.
Bellingham	Isaac W. Powell, M. D.	Do.
Bremerton	D. H. Polk, M. D.	Do.
Everett	Carl W. Stomberg, M. D.	Do.
Hoquiam	E. L. Calhoun, M. D.	Do.
Seattle	*E. T. Hanley, M. D.	Commissioner of health.
Spokane	*Ralph Hendricks, M. D.	Health officer.
Tacoma	*Herman S. Judd, M. D.	Director of health.
Vancouver	*George H. T. Sparling, M. D.	County and city health officer.
Walla Walla	*J. E. Vanderpool, M. D.	Do.
Yakima	*H. Storgaard, M. D.	Do.
West Virginia:		
Bluefield	*David B. Lepper, M. D., C. P. H.	City health director.
Charleston	Hugh B. Robins, M. D.	Health commissioner.
Clarksburg	*Benjamin F. Matheny, M. D.	City health officer.
Fairmont	*J. A. Jamison, M. D.	Do.
Huntington	L. T. Vinson, M. D.	Health officer.
Martinsburg	*W. Ross Cameron, M. D.	City and county health officer.
Morgantown	*Harry H. Pierce, M. D., C. M.	City health officer.
Moundsville		
Parkersburg	*Arthur D. Knott, M. D., P. H. D.	City-county health officer.
Wheeling	*W. H. McLain, M. D.	Do.
Wisconsin:		
Appleton	F. P. Dohearty, M. D.	Health officer.
Ashland	C. O. Hertzman, M. D.	Health commissioner.
Beloit	*C. W. Andrews, M. D.	Health officer.
Eau Clair	L. H. Flynn, M. D.	Do.
Fond du Lac	*G. B. McKnight, M. D.	Health commissioner.
Green Bay	*H. S. Atkinson, M. D.	City physician and health commissioner.
Jamesville	Fred B. Welch, M. D.	City health officer.
Kenosha	*Gustav Windesheim, M. D.	Director of health.
La Crosse	*Anthony M. Murphy	Acting health commissioner.
Madison	*F. E. Bowman, B. L., M. D.	Health officer.
Manitowoc	William G. Kemper, M. D.	Commissioner of health.
Marinette	J. William Boren, M. D.	Do.
Milwaukee	*John P. Koehler, M. D.	Do.
	E. V. Brumbaugh, M. D.	Deputy health officer.
School hygiene division	George P. Barth, M. D.	Director.
Division of general diseases	William J. McKillip, M. D.	Do.
Vital statistics	George E. Adams	Deputy registrar.
Division of tuberculosis	George R. Ernst, M. D.	Director.
Contagious disease division	M. R. French, M. D.	Do.
Division of food and sanitary inspection	Stanley Pilgrim, M. D.	Do.
Bureau of laboratories	R. W. Cunliffe	Do.
Division of child welfare	E. V. Brumbaugh, M. D.	Do.
Division of nurses	Alma Brunk, R. N.	Do.
Oshkosh	*Edward Joseph Campbell, M. D.	Health commissioner.
Racine	*W. W. Bauer, M. D.	Health officer.
Sheboygan	*Herbert L. Wright, Ph. G., M. D., Dr. P. H.	Commissioner of public health.
Stevens Point	F. R. Kremos, M. D.	Commissioner of health and city physician.
Superior	*George H. Conklin, M. D.	Commissioner of health.
Waukesha	Frank M. Scheele, M. D.	Health commissioner.
Wausau	*L. F. Bugbee	Health officer.
West Allis	*Samuel C. McCorkle, M. D.	Health commissioner.
Wyoming:		
Casper	H. R. Lathrop, M. D.	County health officer.
Cheyenne	N. C. Nelson, M. D.	Do.

STATE AND INSULAR HEALTH AUTHORITIES, 1929

Directory, with Data as to Appropriations and Publications

Directories of the State and insular health authorities of the United States for each year from 1912 to 1928 have been published in the Public Health Reports¹ for the information of health officers and others interested in public-health activities. The present volume (1929), like those formerly issued, has been compiled from information furnished by the respective State and insular health officers, and includes data as to appropriations and publications.

Where an officer has been reported to be a "whole-time" health officer, that fact is indicated by an asterisk (*). For this purpose a "whole-time" health officer is defined as "one who does not engage in the practice of medicine or in any other business, but devotes all his time to official duties."

ALABAMA

Board of censors of the State medical association acting as a committee of public health:

Bibb Graves, governor, ex officio chairman, Montgomery.
Fred W. Wilkerson, M. D., Montgomery.
W. D. Partlow, M. D., Tuscaloosa.
R. S. Hill, M. D., Montgomery.
W. S. Britt, M. D., Eufaula.
D. T. McCall, M. D., Mobile.
W. W. Harper, M. D., Selma.
John P. Stewart, M. D., Attalla.
J. S. McLester, M. D., Birmingham.
B. L. Wyman, M. D., Birmingham.

Executive health officer:

*Douglas L. Cannon, M. D., C. P. H., state health officer, Montgomery.

Secretary to executive health officer:

*Bossie A. Tucker, Montgomery.

Financial secretary:

*Adna Eley Aldredge, Montgomery.

Registrar of vital statistics:

*W. T. Fales, Sc. D., Montgomery.

*Ethel Hawley, chief clerk, Montgomery.

Laboratories of the State board of health:

General director—

*L. C. Havens, M. D., Montgomery.

Assistant director—

*Catherine Ridgeway, Montgomery.

Anniston branch—

*Katie Mae Wilson, Anniston.

Birmingham branch—

George A. Denison, Birmingham.

Mobile branch—

*C. H. Waite, Mobile.

Tennessee Valley—

*A. J. Perollo, M. D., Albany.

Tuscaloosa branch—

*Lucile Watt, Tuscaloosa.

Selma branch—

*Nellie K. Whitfield, Selma.

State sanitary engineer:

*G. H. Hazlehurst, C. E., M. C. E., Montgomery.

Assistant sanitary engineers:

*H. G. Menke, B. C. E., Montgomery.

*C. C. Kiker, B. C. E., Montgomery.

*T. H. Millard, B. C. E., Montgomery.

Communicable disease control:

*D. G. Gill, M. D., director, Montgomery.

County organization:

Divisional directors—

*C. L. Murphree, M. D., Gadsden.

*B. F. Austin, M. D., Birmingham.

A. H. Graham, M. D., Montgomery.

G. C. Marlette, M. D., Bay Minette.

Director of training base—

L. R. Poole, M. D., Wetumpka.

Public health nursing:

*Jessie L. Marriner, R. N., director, Montgomery.

*Francis Montgomery, R. N., assistant director, Montgomery.

*Annie Jewel Brown, R. N., assistant director, Montgomery.

Inspection:

*C. A. Abele, Ch. E., director, Montgomery.

*H. J. Thrasher, deputy inspector, Montgomery.

*H. W. Caldwell, deputy inspector, Montgomery.

*C. H. South, deputy inspector, oyster control, Mobile.

*J. W. Garrett, milk inspector, Selma.

*U. D. Franklin, milk inspector, Montgomery.

*F. H. Downs, milk inspector, Montgomery.

*C. G. Allen, milk inspector, Montgomery.

Appropriation for fiscal year ending September 30, 1929:

Central administration \$405,876.95

County health work, per county 2,500.00

Milk inspection of dairy plants 12,000.00

¹ Reprints Nos. 83, 123, 190, 256, 344, 405, 488, 544, 605, 706, 775, 871, 949, 1043, 1106, 1188, and 1254, from the Public Health Reports.

November 15, 1929

ALASKA

Board of health:
 George A. Parks, governor, Juneau.
 Harry C. De Vigne, M. D., commissioner of health, Juneau.
 Executive health officer:
 Harry C. De Vigne, M. D., commissioner of health, Juneau.
 Assistant commissioners of health:
 Curtis Welch, M. D., Nome.
 J. A. Sutherland, M. D., Fairbanks.
 A. H. Blakemore, Cordova.
 Appropriation for 1927-28, \$18,100.

ARIZONA

State board of health:
 John C. Phillips, governor, president, Phoenix.
 K. Berry Peterson, attorney general, vice president, Phoenix.
 R. J. Stroud, M. D., secretary, Tempe.
 Executive health officer:
 *R. J. Stroud, M. D., State superintendent of public health, Tempe.

Executive secretary:
 *Maud J. Tansey, Phoenix.
 State registrar of vital statistics:
 *R. J. Stroud, M. D., Tempe.

State bureau of vital statistics:
 *Anna M. Galbraith, Phoenix.

State laboratory:
 *Jane H. Rider, director, Tucson.

*Marion E. Stroud, bacteriologist, Tucson.
 Appropriations for the years ending June 30, 1930
 and 1931:

State board of health—	
Salaries.....	\$12,800
Operating expense.....	5,450
Traveling expense.....	2,500
Capital investment.....	500
Repairs and replacements.....	150
Total for one year.....	21,400
Total for two years.....	42,800
State laboratory—	
Salaries.....	6,840
Operating expense.....	700
Traveling expense.....	900
Capital investment.....	500
Total for one year.....	8,940
Total for two years.....	17,880

ARKANSAS

Board of health:
 E. L. Watson, M. D., president, Newport.
 O. L. Williamson, M. D., Marianna.
 A. S. Gregg, M. D., Fayetteville.
 R. M. Eubanks, M. D., Little Rock.
 L. D. Duncan, M. D., Waldron.
 W. P. Parks, M. D., Hot Springs.
 F. O. Mahony, M. D., El Dorado.
 Executive health officer:
 *C. W. Garrison, M. D., State health officer, Little Rock.

Bureau of vital statistics:
 *Mrs. Mary Ellis Brown, statistician, Little Rock.

Hygienic laboratory:

*H. V. Stewart, associate director, Little Rock.
 Bureau of sanitation and malaria control:
 *M. Z. Bair, chief sanitary engineer, Little Rock.

Bureau of child hygiene:

*C. W. Garrison, M. D., director, Little Rock.
 County health units:
 *Gordon Hastings, M. D., director, Little Rock.

Appropriations for biennial period ending June 30, 1931:

Executive department, salaries and miscellaneous.....	\$31,600
Bureau of vital statistics.....	36,800
Payment of local registrars.....	31,000
Malaria control.....	9,750
Bureau of sanitation.....	28,400
Bureau of child hygiene.....	3,000
Hygienic laboratory.....	21,240
County Health units.....	10,000
Total.....	171,800

CALIFORNIA**Board of public health:**

George E. Ebright, M. D., president, San Francisco.

Fred F. Gundrum, M. D., vice president, Sacramento.

Walter M. Dickie, M. D., director of public health, Sacramento.

A. J. Scott, Jr., M. D., Los Angeles.

Edward F. Glaser, M. D., San Francisco.

Adelaide Brown, M. D., San Francisco.

Robert A. Peers, M. D., Colfax.

Department of public health:

*Walter M. Dickie, M. D., director of public health, Sacramento.

Epidemiologist:**District health officer:**

*Gavin Telfer, M. D., southern division.

Chief sanitary inspector:

*Edward T. Ross, Sacramento.

Chief cannery inspector:

*Milton P. Duffy, San Francisco.

Vital statistics:

*L. E. Ross, registrar, Sacramento.

Bureau of registration nurses:

*Sarah G. White, R. N., chief, Sacramento.

Bureau of tuberculosis:

*Edythe L. M. Tate-Thompson, chief, Sacramento.

Bureau of food and drugs:

*M. E. Jaffa, chief, Berkeley.

Bacteriological laboratory:

*W. H. Kellogg, M. D., chief, Berkeley.

Bureau of sanitary engineering:

*C. G. Gillespie, C. E., chief, Berkeley.

Bureau of child hygiene:

*Ellen S. Stadtmuller, M. D., chief, San Francisco.

Malaria control:

*Edward Stuart, C. E., in charge.

**Appropriations for biennial period ending June 30,
1930 (for eightieth and eighty-first fiscal years):**

Administration—	
For support.....	\$569,500
Aid to mosquito abatement districts.....	10,000
Division of cannery inspection—	
For support.....	148,720
(Payable from cannery inspection funds.)	
Nurses registration bureau—	
For support.....	36,680
Tuberculosis bureau—	
For support.....	46,900
For subsidies.....	640,000
Total.....	1,451,800

Other sources of revenue:

Fees for registration of nurses, \$10 each.
 Renewal of registration certificates, \$1 per year.
 Licensing of cold-storage warehouses, rated according to capacity.
 Fines for violation of pure food and drugs act.
 Fees for licenses, \$10 each, and contributions, for credit to division of cannery inspection.
 Fees for certified copies of records.

Publications issued by health department:

- Biennial report.
- Weekly bulletin.

COLORADO

Board of health:

Sherman Williams, M. D., president, Denver.
 S. R. McKelvey, M. D., secretary, Denver.
 J. S. Hasty, M. D., Lamar.
 Ben Beshaar, M. D., Trinidad.
 Paul J. Connor, M. D., Denver.
 Ralph M. Jones, D. O., Denver.
 C. A. Davlin, M. D., Alamosa.
 Charles W. Thompson, M. D., Pueblo.
 William P. Gasser, M. D., Loveland.

Executive health officer:

S. R. McKelvey, M. D., secretary, State board of health, Denver.

Bacteriologist:

William C. Mitchell, M. D., Denver.

Epidemiologist:

W. H. Twining, M. D., Denver.

State food and drug commissioner:

*S. H. Loeb, Denver.

Division of social hygiene:

*S. R. McKelvey, M. D., director, Denver.

Division of sanitary engineering:

*Dana E. Kepner, director, Denver.

Division of plumbing inspection:

*Irving H. Fuller, inspector, Denver.

Appropriations for fiscal years ending June 30, 1930 and 1931:

	1930	1931
Salaries.....	\$27,300	\$27,300
Laboratory equipment and supplies.....	2,000	2,000
Printing and publications.....	2,800	2,800
Traveling expenses.....	5,000	5,000
Samples and supplies (food).....	300	300
Venereal disease.....	20,000	20,000
Incidental expenses.....	1,750	1,750
Total.....	50,150	50,150

CONNECTICUT

Public health council:

S. B. Overlock, M. D.
 C. E. A. Winslow, D. P. H.
 James W. Knox.
 Edward P. Jones.
 James A. Newlands.
 David R. Lyman, M. D.

Executive health officer:

*Stanley H. Osborn, M. D., C. P. H., commissioner of health, Hartford.

Bureau of preventable diseases:

*Millard Knowlton, M. D., C. P. H., director.

Bureau of vital statistics:

*William C. Welling, director.

Bureau of public-health nursing:

*Sarah R. Addison, R. N., director.

Bureau of child hygiene:

*A. Elizabeth Ingraham, M. D.

Bureau of public-health instruction:

*Elizabeth C. Nickerson, C. P. H.

Bureau of laboratories:

*F. Lee Mickle, director.

Bureau of sanitary engineering:

*Warren J. Scott, director.

Division of occupational diseases:

*Albert S. Gray, M. D.

Division of venereal diseases:

*Henry P. Talbot, M. D.

Division of mental hygiene:

*James L. McCartney, M. D., chief.

Division of mouth hygiene:

Clyde R. Salmons, D. D. S., chief.

Division of medical registration:

Ruth H. Monroe, chief.

Appropriation for fiscal period ending June 30, 1931 (two years), \$648,619.

Publications issued by health department:

Weekly bulletin.

Monthly bulletin.

Annual vital-statistics report.

Annual report of State department of health.

Miscellaneous pamphlets.

DELAWARE

State board of health:

William P. Orr, M. D., president, Lewes.

Mrs. Charles Warner, vice president, Wilmington.

Robert E. Ellegood, M. D., Wilmington.

Margaret I. Handy, M. D., Wilmington.

Mrs. F. G. Tallman, Wilmington.

W. R. Pierce, M. D., Milford.

Mrs. Arthur Brewington, Delmar.

Charles R. Jefferis, Jr., D. D. S., Wilmington.

Executive health officer:

*Arthur C. Jess, M. D., C. M., Dover.

Director of laboratory:

*Rowland D. Herdman, Dover.

Director of child hygiene:

*Cleland A. Sargent, M. D., Dover.

Sanitary engineer:

*Richard C. Beckett, Dover.

Superintendent of Brandywine sanatorium:

*Lawrence D. Phillips, M. D., Marshallton.

Superintendent of Edgewood sanatorium:

*Elizabeth Van Vranken, R. N., Marshallton.

November 15, 1929

Appropriations for each fiscal year ending

June 30, 1930 and 1931:

General administration.....	\$75,000
Hygienic laboratory.....	9,000
Edgewood sanatorium for colored tuberculous patients.....	14,000
Brandywine sanatorium for white tuberculous patients.....	40,000
Total.....	138,000
Permanent improvement of Brandywine sanatorium for white tuberculous patients, (1930).....	35,000
Special vote for Brandywine sanatorium.....	15,000
Publications:	
Biennial report.	
Bi-monthly health news.	
Bulletins on health subjects.	

DISTRICT OF COLUMBIA

Executive health officer:

*William C. Fowler, M. D., health officer, Washington.

Assistant health officer:

*Edward J. Schwartz, M. D., Washington.

Chief clerk and deputy health officer:

*Arthur G. Cole, Washington.

Chief bureau of preventable diseases and director bacteriological laboratory:

*James G. Cumming, M. D., Washington.

Bacteriologist:

*John E. Noble, Washington.

Serologist:

*Jesse P. Porch, D. V. M., Washington.

Chemist:

*John B. Reed, Washington.

Chief sanitary inspector:

*J. Frank Butts, Washington.

Director child hygiene service:

*Hugh J. Davis, M. D., Washington.

Chief food inspector:

*Reid R. Ashworth, D. V. S., Washington.

Chief medical and sanitary inspector of schools:

*Joseph A. Murphy, M. D., Washington.

Appropriations for the fiscal year ending

June 30, 1930:

Salaries.....	\$181,600
Prevention of communicable diseases.....	45,000
Disinfecting service.....	3,700
Isolation wards at hospitals.....	24,000
Milk and food inspection and regulation.....	8,100
Dispensary service, including treatment of tuberculosis and venereal diseases.....	24,200
Maintaining a child hygienic service.....	54,000
Hygiene and sanitation, public schools.....	78,600
Laboratory service.....	3,000
Miscellaneous.....	9,900
Total.....	432,100

Publications issued by health department:

Weekly report by health department.

Annual report of health officer.

Monthly statement of average grade of milk sold.

FLORIDA

Board of health:

Chas. H. Mann, president, Jacksonville.
H. Mason Smith, M. D., Tampa.
W. D. Nobles, M. D., Pensacola.

Executive health officer:

*Henry Hanson, M. D., State health officer, Jacksonville.

Diagnostic laboratories:

*Pearl Griffith, B. E., acting director, Jacksonville.

Bureau of vital statistics:

*Stewart G. Thompson, D. P. H., director, Jacksonville.

Bureau of communicable diseases:

*F. A. Brink, M. D., director, Jacksonville.

Bureau of sanitary engineering:

*E. L. Filby, C. E., director, Jacksonville.

Bureau of child hygiene and public health nursing:

*Mrs. Laurie Jean Reid, R. N., director, Jacksonville.

Appropriation for health department:

One-half mill tax levied upon the assessable property of the State for the year ending June 30, 1929.

Publications issued by health department:

Pamphlets covering all phases of public health. Public health information disseminated through the weekly and daily papers of the State. Florida health notes.

Annual reports.

GEORGIA

Board of health:

Robert F. Maddox, president, Atlanta.

James H. McDuffle, M. D., vice president, Columbus.

T. F. Abercrombie, M. D., secretary, Atlanta.

Charles H. Richardson, M. D., Macon.

A. D. Little, M. D., Thomasville.

John W. Daniel, M. D., Savannah.

D. M. Carter, M. D., Madison.

J. G. Dean, M. D., Dawson.

John A. Rhodes, M. D., Crawfordville.

A. C. Shamblin, M. D., Rome.

C. R. Brice, D. D. S., Gainesville.

A. A. Lawry, D. D. S., Valdosta.

M. S. Brown, M. D., Fort Valley.

M. L. Duggan, State superintendent of schools, ex officio, Atlanta.

J. M. Sutton, State veterinarian, ex officio, Atlanta.

Executive health officer:

*T. F. Abercrombie, M. D., commissioner, Atlanta.

*Joe P. Bowdoin, M. D., deputy commissioner, Atlanta.

Division of venereal-disease control:

*Joe P. Bowdoin, M. D., director, Atlanta.

Division of county health work:

*M. E. Winchester, M. D., director, Atlanta.

Division of laboratories:

*T. F. Sellers, director, Atlanta.

Division of sanitary engineering:

*L. M. Clarkson, director, Atlanta.

State tuberculosis sanatorium:

*Edson W. Glidden 2d, M. D., superintendent, Alto.

Bureau of vital statistics:

Division of child hygiene:

*Joe P. Bowdoin, M. D., director, Atlanta.

Georgia training school for mental defectives:

*John W. Oden, M. D., superintendent.

Division of accounting and purchasing:

*C. L. Tinsley, director, Atlanta.

Appropriations for the fiscal year ending Dec. 31, 1929:

General appropriation.....	\$110,000.00
Venereal-disease control.....	10,000.00
Maternity and infant hygiene.....	5,000.00
State tuberculosis sanatorium.....	210,000.00
Georgia training school for mental defectives.....	60,000.00
Total appropriation by legislature	395,000.00
Maternity and infancy (Federal Government funds, fiscal year ending June 30, 1929).....	29,530.55
Central administration, county health work (International Health Board funds).....	4,200.00
Central administration, malaria control (International Health Board funds).....	3,500.00
Grand total.....	432,230.55

HAWAII

Board of health:

F. E. Trotter, M. D., president and executive officer, Honolulu.

Harry R. Hewitt, attorney general, Honolulu.

A. G. Hodgins, M. D., Honolulu.

D. S. Bowman, Honolulu.

J. D. McVeigh, Honolulu.

J. Ordenstein, Honolulu.

George Denison, Honolulu.

Executive health officer:

*F. E. Trotter, M. D., president of the board of health, Honolulu.

Secretary:

*Mae R. Weir, Honolulu.

Bureau of sanitation:

*S. W. Tay, director, Honolulu.

*Robert L. Lam, sanitary engineer, Honolulu.

*A. K. Arnold, division supervisor, Oahu, Honolulu.

*C. Charlock, health officer, Island of Hawaii, Hilo.

*J. Caceres, division supervisor, Island of Hawaii, Hilo.

*R. C. Lane, division supervisor, Island of Maui, Wailuku.

*A. P. Christian, division supervisor, Island of Kauai, Kapaa.

Registrar general of vital statistics:

*M. H. Lemon, registrar general, Honolulu.

Bacteriologist:

*A. N. Sinclair, M. B., C. M., Honolulu.

Tuberculosis bureau:

*S. E. Doolittle, M. D., Honolulu.

Physician director, bureau of leprosy:

*James T. Wayson, M. D., Honolulu.

Bureau of maternal and infant hygiene:

*Mabel L. Smyth, R. N., director, Honolulu.

Food commissioner and analyst:

*M. B. Bairros, Honolulu.

Territorial hospital:

*A. B. Eckerd, M. D., superintendent, Kaneohe, Oahu.

Leper settlement:

*R. L. Cooke, superintendent, Kalaupapa, Molokai.

*Robert L. McArthur, M. D., Physician, Kalaupapa, Molokai.

*George B. Tuttle, M. D., assistant physician, Kalaupapa, Molokai.

Appropriations, 1929-1931:

Board of health—General office—

Salary, president.....	\$14,400
Other personal services.....	68,380
Other current expenses.....	15,200
Repairs and alterations, Kalihi hospital, Kapiolani girls' home and Kalihi boys' home.....	16,000
Motor vehicles.....	1,500
Other equipment.....	750

Bureau of vital statistics—

Personal services.....	30,600
Other current expenses.....	12,000
Equipment.....	400

Bureau of sanitation—

Personal services.....	185,800
Other current expenses.....	23,000
Motor vehicles.....	5,000
Other equipment.....	665

Plague campaign—

Personal services.....	39,450
Other current expenses.....	16,000
Motor vehicles.....	800
Other equipment.....	730

Quarantine service: General service—

Personal services.....	23,720
Other current expenses.....	40,000
Motor vehicles.....	800
Other equipment.....	500

Quarantine service: Quarantine stations—

Personal services.....	6,995
Other current expenses.....	8,000
Equipment.....	450

Bacteriological laboratories—

Personal services.....	12,640
Other current expenses.....	3,000
Equipment.....	500

Agents (Government physicians)—

Personal services.....	79,800
Pure food and drugs—	
Personal services.....	21,600

Personal services.....	21,600
Other current expenses.....	3,750

Equipment.....	300
----------------	-----

Tuberculosis: Government hospital (Puunmaile home)—

Personal services.....	41,450
Other current expenses.....	40,000
Equipment.....	2,000

November 15, 1929

Appropriations, 1929-1931—Continued.

Tuberculosis: Private hospitals—	
Contributions to Leahi home.	168,000
Contributions to Kula sanitarium.	96,000
Contributions to Samuel Maelona Memorial Hospital.	72,000
General medical assistants and nursing—	
Personal services.	122,195
Other current expenses.	35,500
Motor vehicles.	6,500
Other equipment.	1,700
Territorial hospital: Sanitarium—	
Personal services.	18,240
Other current expenses.	15,577
Equipment.	1,017
Territorial hospital—	
Personal services.	261,400
Other current expenses.	199,100
Motor vehicles.	1,500
Other equipment.	78,500
Highways, trails, etc.	7,500.00
Frame dormitories.	25,000.00
Leper settlement and Kalihi hospital—	
Personal services.	217,660.00
Other current expenses.	442,000.00
Motor vehicles.	3,700.00
Other equipment.	8,000.00
Highways, trails, etc.	10,000.00
Maternity ward, Kalaupapa.	2,000.00
New cottage at Kalaupapa.	3,000.00
Grants, subsidies, and contributions.	21,200.00
It being provided that from this amount of \$21,200 a cash allowance of \$10 per annum shall be paid to each inmate of the Kalihi hospital and the Kalaupapa settlement, which shall be paid quarterly.	
Kapiolani girls' home—	
Personal services.	15,330.00
Other current expenses.	31,000.00
Equipment.	1,550.00
Kalihi boys' home—	
Personal services.	28,180.00
Other current expenses.	31,000.00
Equipment.	750.00
Boards of examiners—	
Personal services.	250.00
Other current expenses.	700.00
Maternal and infant hygiene—	
Personal services.	36,903.84
It being provided, however, that the sum of \$23,451.92 of the above appropriation of \$36,903.84 or such amount thereof as remains unexpended, shall not be available for appropriation in the event that Federal funds are provided and made available as the same have been heretofore available.	

Appropriations, 1929-1931—Continued.

Aidings indigent persons released from the Kalihi hospital and leper settlement, Kalaupapa—	
Grants, subsidies, and contributions.	3,500.00
Annual trips of children to visit parents, Kalaupapa—	
Other current expenses.	800.00
Relief of persons released from Kalihi hospital and Kalaupapa—	
Grants, subsidies, and contributions.	12,000.00
Total.	2,697,522.84

Publications issued by health department:

- Annual report of president.
- Registrar general's report.
- Monthly morbidity and mortality report.

IDAHO

Department of public welfare:

- C. K. Macey, commissioner.
- *W. V. Leonard, State chemist and sanitary engineer.
- F. W. Almond, M. D., public health adviser.
- *Lawrence J. Peterson, bacteriologist.
- Robert H. Pratt, dairy, food, drug, hotel, and sanitary inspector.
- Robert Quarles, dairy, food, drug, hotel, and sanitary inspector.

Executive health officer:

- *C. K. Macey, commissioner of public welfare, Boise.

Bureau of child hygiene:

- *Mrs. Dorothy Ewen, State director.

Appropriations for biennial period ending Dec. 31, 1930:

Personal services.	\$49,000
Other expenses.	16,500
Venereal-disease control.	5,000
Child hygiene.	5,000
Total.	75,500

ILLINOIS

Board of public-health advisers:

- Clifford U. Collins, M. D., chairman.
- James H. Hutton, M. D., secretary.
- R. J. Coulas, M. D., vice chairman.
- Arnold H. Kegel, M. D.

- W. A. Evans, M. D.

Director of public health:

- *Andy Hall, M. D., Springfield.

Assistant director of public health:

- *Thomas H. Leonard, M. D.

Division of sanitation and engineering:

- *Harry F. Ferguson, C. E., chief sanitary engineer.

Division of communicable diseases:

- *J. J. McShane, M. D., D. P. H., chief.

Division of child hygiene and public-health nursing:

- *Grace S. Wightman, M. D., superintendent.

Division of tuberculosis:

*Thomas H. Leonard, M. D., acting chief.

Division of laboratories:

*Thomas G. Hull, Ph. D., chief.

Division of vital statistics:

*Sheldon L. Howard, registrar.

Division of public-health instruction:

*Baxter K. Richardson, chief.

Division of social hygiene:

*C. C. Copelan, M. D., chief.

Division of hotel and lodging-house inspection:

*John Ransom, superintendent.

Appropriations for biennial period ending June 30, 1932:

Salaries.....	\$808,140
Salaries State officers.....	30,400
Office expenses.....	22,500
Traveling expenses.....	130,850
Operation.....	193,834
Repairs and equipment.....	25,998
Contingent.....	30,000
Printing.....	52,000
Postage.....	20,000
Rabies.....	6,000
Total.....	1,319,722

Publications issued by health department:

Illinois Health Quarterly.

Illinois Health Messenger (bimonthly).

Weekly press bulletin.

Educational health circulars.

INDIANA

Board of health:

A. J. Hostettler, M. D., president, Lagrange.
Calvin R. Marshall, M. D., vice president,
Indianapolis.

John H. Green, M. D., North Vernon.

John W. Iddings, M. D., Crown Point.

William F. King, M. D., secretary, Indian-
apolis.

Executive health officer:

*William F. King, M. D., State health commis-
sioner, Indianapolis.

Division of vital statistics:

*H. M. Wright, director, Indianapolis.

Laboratory of hygiene:

*C. F. Adams, M. D., B. S. A., director,
Indianapolis.

Division of food and drugs:

*I. L. Miller, State food and drug commis-
sioner, Indianapolis.

Milk laboratory:

*Frank C. Wilson, director, Indianapolis.

Water and sewage laboratory:

*Lewis S. Finch, sanitary engineer, Indian-
apolis.

Division of child hygiene:

*Ada E. Schweitzer, M. D., director, Indian-
apolis.

Division of communicable diseases:

*H. W. McKane, M. D., director, Indianapolis.

Epidemiologist and assistant secretary:

*Walter W. Lee, M. B., Indianapolis.

Division of school hygiene:

*H. R. Condrey, director, Indianapolis.

Division of housing:

*A. E. Wert, director, Indianapolis.

Department of public-health nursing:

*Eva F. McDougal, R. N., director, Indian-
apolis.

Appropriations for biennial period ending Septem-
ber 30, 1931, \$256,500 per annum.

IOWA

State department of health:

EX OFFICIO

John Hammill, governor, Des Moines.

Ed. M. Smith, secretary of state, Des Moines.
R. E. Johnson, treasurer of state, Des Moines.
J. W. Long, auditor of state, Des Moines.
M. G. Thorntburg, secretary of agriculture, Des
Moines.

Henry Albert, M. D., State health commis-
sioner, Des Moines.

APPOINTIVE BY GOVERNOR

H. R. Sugg, M. D., president, Clinton.

C. T. Lesan, M. D., Mount Ayr.

H. W. Plummer, M. D., Lime Springs.

W. A. Seidler, M. D., Jamaica.

J. D. Lowry, M. D., Fort Dodge.

Executive health officer:

*Henry Albert, M. D., commissioner of health
Des Moines.

Deputy commissioner of health:

*D. C. Steelsmith, M. D., Des Moines.

Chief clerk:

*Lynn Clemens, Des Moines.

Secretary:

*Naomi B. Wherry, Des Moines.

Division of preventable diseases:

*Howard A. Lanpher, M. D., director and
epidemiologist, Des Moines.

Division of tuberculosis:

*Lucy McMichael, R. N., field agent, Des
Moines.

Division of vital statistics:

*R. L. McLaren, director, Des Moines.

Division of sanitary engineering:

*A. H. Wieters, C. E., director, Des Moines.

Division of public health nursing:

*Edith S. Countryman, R. N., director, Des
Moines.

Division of nursing education:

*Maude E. Sutton, R. N., director, Des
Moines.

Division of public health education:

*D. Pirie-Beyea, State lecturer, Des Moines.

Division of examinations and licensures:

*H. W. Grete, director, Des Moines.

Division of law enforcement:

*Herman B. Carlson, LL. D., inspector, Des
Moines.

Division of barber inspection:

*John T. McGruder, chief inspector, Des
Moines.

Division of cosmetology inspection:

*Violet Washburn, chief inspector, Des Moines.

Housing work is carried on by engineering division.

November 15, 1929

Medical, nurses, dental, optometry, cosmetology, chiropractic, osteopathy, embalming, podiatry, and barber examining boards are combined in State department of health.

Appropriations for fiscal year ending June 30, 1929:

For salaries and wages.....	\$40,200
Miscellaneous traveling.....	2,500
Antitoxin, vaccine, and other prophylactics.....	5,000
Sanitary engineering and housing—	
Salaries and wages.....	14,000
Traveling.....	6,000
Equipment and laboratory.....	1,000
Quarantine enforcement and other contingencies.....	4,000
Dues in national organizations.....	200
Investigation of tuberculosis.....	4,000
Traveling epidemiologist.....	1,800
Traveling lecturer.....	1,500
Stream pollution.....	625
Replacing car.....	500
New car.....	400
Total.....	81,725

Publications:

Biennial report.

Quarterly bulletin.

Health news-letter.

KANSAS

Board of health:

Clarence A. McGuire, M. D., president, Topeka.

H. L. Aldrich, M. D., vice president, Caneys.

George I. Thacher, M. D., Waterville.

John H. Henson, M. D., Mound Valley.

Charles W. Robinson, M. D., Atchison.

Clay E. Coburn, M. D., Kansas City.

Arthur J. Anderson, M. D., Lawrence.

Anna Perkins, M. D., El Dorado.

Walter J. Elderts, M. D., Wichita.

Thomas H. Finnigan, attorney, Kansas City.

Executive health officer:

*Earle G. Brown, M. D., secretary State board of health, Topeka.

Division of vital statistics:

*W. J. Davies, State registrar.

Division of communicable diseases:

*C. H. Kinnaman, M. D., epidemiologist, Topeka.

Division of foods and drugs:

*Thomas I. Dalton, Ph. C., assistant chief food and drug inspector, Topeka.

Division of child hygiene:

*J. C. Montgomery, M. D., chief, Topeka.

Division of rural sanitation:

*J. C. Montgomery, M. D., director, Topeka.

Division of water and sewage:

Earnest Boyce, chief, Lawrence.

Division of public-health education:

*Earle G. Brown, M. D., director, Topeka.

Division of venereal diseases:

*Earle G. Brown, M. D., director, Topeka.

Water and sewage laboratories at Kansas University:

Earnest Boyce, director, Lawrence.

Food laboratory at Kansas University:

Prof. E. H. S. Bailey, director of food analysis, Lawrence.

Drug laboratory at Kansas University:

Prof. L. D. Havenhill, director of drug analysis, Lawrence.

Food laboratory at Kansas Agricultural College:

Prof. H. H. King, director of food analysis, Manhattan.

Public-health laboratory, Topeka:

*Earle G. Brown, M. D., acting director, Topeka.

Appropriations for fiscal year ending June

30, 1929:

Salaries.....	\$21,300
Miscellaneous.....	3,550
Water and sewage division.....	3,000
Free distribution of antitoxins, etc.....	3,500
Public-health laboratory, and the department of division of venereal disease control; distribution of arsphenamine (606) to indigent poor of the State; assistance and maintenance of clinics.....	10,000
Division of child hygiene.....	5,000
Division of food and drugs.....	5,000
County aid, full-time demonstrations..	5,000
Total.....	56,350

Other sources of revenue:

Marriage fees, approximately \$20,000.

Water and ice analysis fees, approximately \$14,000.

Publications issued by health department:

Biennial report.

Weekly morbidity report.

KENTUCKY

Board of health:

E. M. Howard, M. D., president, Harlan.

Geo. S. Coon, Louisville.

A. T. McCormack, M. D., secretary, Louisville.

J. Watts Stovall, Grayson.

Vernon Blythe, M. D., Paducah.

H. T. Alexander, M. D., Augusta.

H. H. Carter, D. O., Shelbyville.

Lawrence T. Minish, M. D., Frankfort.

Addison Dimmitt, Louisville.

Executive health officer:

*A. T. McCormack, M. D., D. P. H., State health officer, Louisville.

Bureau of vital statistics:

*J. F. Blackerby, director, Louisville.

Bureau of bacteriology:

Lillian H. South, M. D., director, Louisville.

Bureau of sanitary engineering:

*F. C. Dugan, C. E., director, Louisville.

Bureau of food, drugs, and hotels:

*Sarah Vance Dugan, director, Louisville.

Bureau of venereal diseases:

*Jethro Hancock, M. D., Louisville.

Bureau of public health nursing:

*Margaret East, R. N., director, Louisville.

Bureau of maternity and child health:

*Annie S. Veech, M. D., director, Louisville.

Bureau of prevention of trachoma and blindness:

*C. B. Kobert, M. D., director, Louisville.

Bureau of epidemiology:

*J. L. Jones, M. D., director, Louisville.

Bureau of county health work:

*P. E. Blackerby, M. D., director and assistant State health officer, Louisville.

*J. W. Davis, M. D., Winchester.

*V. A. Stilley, M. D., assistant, Louisville.

Bureau of tuberculosis and State tuberculosis sanitarium:

*Paul A. Turner, M. D., director and superintendent, Louisville.

Bureau of dental health:

J. F. Owen, D. D. S., director, Lexington.

Legislative appropriation for fiscal year ending June 30, 1930, \$145,400.

Publications issued by health department:
Monthly bulletin.

LOUISIANA

Board of health:

J. A. O'Hara, M. D., president, New Orleans.

T. J. Labbe, St. Martinville.

S. de Nux, D. D. S., Marksville.

J. L. Kelly, M. D., Oak Grove.

(Other members to be appointed.)

Fannie B. Nelken, secretary.

Executive health officer:

*J. A. O'Hara, M. D., president, New Orleans.

Mosquito-malaria control:

*W. T. Browne, Ph. D., M. D., director, assistant to president, New Orleans.

Bacteriologist:

W. H. Seemann, M. D., New Orleans.

Registrar:

J. Geo. Dempsey, M. D., New Orleans.

Sanitary engineer:

*John H. O'Neill, New Orleans.

Bureau of mental hygiene:

*H. R. Unsworth, M. D., director, New Orleans.

Analyst:

*Cassius L. Clay, New Orleans.

Bureau of animal industry:

G. T. Jackson, D. V. S., director, New Orleans.

Bureau of public health administration:

*C. V. Akin, surgeon, U. S. P. H. S., director, New Orleans.

Appropriation for fiscal year ending June 30, 1930, \$75,000.

Publications issued by health department:

Quarterly bulletin.

Biennial report.

Miscellaneous leaflets.

MAINE

Public health council:

C. F. Kendall, M. D., chairman, Augusta.

H. A. Kelley, D. D. S., Portland.

Annie Peabody, Portland.

J. G. Towne, M. D., Waterville.

O. R. Emerson, M. D., Newport.

Mrs. Agnes B. Hall, Hampden.

Executive health officer:

*C. F. Kendall, M. D., State commissioner of health, Augusta.

Division of administration:

*C. F. Kendall, M. D., Augusta.

Division of communicable diseases:

*William L. Holt, M. D., director, Augusta.

Division of laboratories:

*Alfred G. Long, M. D., C. P. H., Augusta.

Division of sanitary engineering:

*Elmer W. Campbell, D. P. H., Augusta.

Division of vital statistics:

*C. F. Kendall, M. D., State registrar, Augusta.

Division of social hygiene:

*William L. Holt, M. D., director, Augusta.

Division of public health nursing and child hygiene:

*Edith L. Soule, R. N., Augusta.

Division of dental hygiene:

*Dorothy Bryant, D. H., Augusta.

District health officers:

*J. L. Pepper, M. D., South Portland.

*E. P. Goodrich, M. D., Lewiston.

(Vacancy.)

*G. H. Hutchins, M. D., Waterville.

*L. W. Hadley, M. D., Machias.

*James W. Loughlin, M. D., Newcastle.

*B. F. Porter, M. D., Caribou.

Appropriations for fiscal year ending June

30, 1930:

Salaries and clerk hire	\$39,000
Office expense and epidemic fund	20,000
District and local health officers	40,000
Venereal-disease control work	14,000
Maternity and child-welfare work	25,000
Branch State laboratory, Caribou	2,500
Aid for typhoid carriers	5,000
Total	145,500

Other sources of revenue:

Census Bureau, Washington, D. C., about \$800.

License fees from camps, roadside eating and lodging places, about \$10,000.

MARYLAND

Board of health:

Robert H. Riley, M. D., chairman, Baltimore.

Thomas S. Cullen, M. D., Baltimore.

Thomas H. Robinson, attorney general, Baltimore.

William W. Ford, M. D., Baltimore.

C. Hampson Jones, M. D., Baltimore.

Tolley A. Biays, Baltimore.

Benjamin C. Perry, M. D., Bethesda.

E. F. Kelly, Phar. D., Baltimore.

Burt B. Ide, D. D. S., Baltimore.

Executive health officer:

*Robert H. Riley, M. D., Dr. P. H., director of health, Baltimore.

Division of legal administration:

*J. Davis Donovan, chief, Baltimore.

Committee on public health education:

*Gertrude B. Knipp, secretary, Baltimore.

Bureau of communicable diseases:

*Robert H. Riley, M. D., Dr. P. H., chief, Baltimore.

*C. H. Halliday, M. D., epidemiologist, Baltimore.

*C. W. G. Rohrer, M. D., diagnostician, Baltimore.

Bureau of vital statistics:

*John Collinson, M. D., Dr. P. H., chief, Baltimore.

November 15, 1929

Food and drug commissioner:

*A. L. Sullivan, chief, Baltimore.

Bureau of bacteriology:

*H. C. Ward, B. Ph., chief, Baltimore.

Bureau of sanitary engineering:

*Abel Wolman, B. S. E., chief, Baltimore.

Bureau of chemistry:

*Wyatt W. Randall, Ph. D., chief, Baltimore.

Division of personnel and accounts:

*Walter N. Kirkman, chief, Baltimore.

Bureau of child hygiene:

*J. H. Mason Knox, Jr., M. D., chief, Baltimore.

Appropriations for fiscal year ending September 30, 1930:

Salaries.....	\$280,317
Expenses.....	149,375
Emergency appropriation (epidemics, etc.).....	10,000
Total.....	439,692

Publications issued by health department:

Annual report.

Weekly News Letter.

Monthly bulletin.

MASSACHUSETTS**Public health council:**

George H. Bigelow, M. D., chairman, Boston.
 Roger L. Lee, M. D., Boston.
 Francis H. Lally, M. D., Milford.
 Richard P. Strong, M. D., Boston.
 Sylvester E. Ryan, M. D., Springfield.
 James L. Tigbe, Holyoke.
 Gordon Hutchins, Concord.

Executive health officer:

*George H. Bigelow, M. D., State commissioner of public health, Boston.

Secretary:

*Alice M. Ethier.

Division of administration:

(Under direction of commissioner.)

Division of communicable diseases:

*Clarence L. Seaman, M. D., director, Boston.

Division of sanitary engineering:

*X. H. Goodnough, C. E., director and chief engineer, Boston.

Division of water and sewage laboratories:

*H. W. Clark, director and chemist, Boston.

Division of biologic laboratories:

*Benjamin White, Ph. D., director and pathologist, Boston.

Division of food and drugs:

*Hermann C. Lythgoe, director and analyst, Boston.

Division of child hygiene:

*M. Luise Diez, M. D., director, Boston.

Division of tuberculosis sanatoria:

*Summer H. Remick, M. D., director, Boston.

Division of adult hygiene:

*Herbert L. Lombard, M. D., director, Boston.

Appropriations for department of public health, 1929:

Division of administration—	
Salary of commissioner.....	\$7,500
Personal services.....	19,000
Services other than personal.....	14,000
Division of hygiene—	
Personal services of director and assistants.....	33,000
Services other than personal.....	16,600
Personal services in connection with maternal and infant hygiene.....	21,000
Expenses in connection with maternal and infant hygiene.....	10,900
Division of communicable diseases—	
Personal services of director, district health officers, etc.....	65,000
Services other than personal.....	19,200
Personal services in connection with control of venereal diseases.....	12,300
Expenses in connection with control of venereal diseases.....	34,000
Wassermann Laboratory—	
For personal services.....	15,000
For expenses of laboratory.....	5,300
Antitoxin and vaccine laboratory—	
For personal services.....	63,400
Other services.....	39,500
Inspection of food and drugs—	
For personal services.....	54,075
Other services.....	19,225
For administering the shellfish law—	
Personal services.....	2,100
Other services.....	900
Water supply and disposal of sewage, engineering division—	
For personal services.....	66,000
For other services.....	18,800
Water supply and disposal of sewage, division of water and sewage laboratories—	
For personal services.....	41,095
For other services.....	8,300
Division of tuberculosis—	
For personal services.....	35,300
Services other than personal.....	10,400
For personal services of tuberculosis clinic units.....	43,500
Services other than personal (clinic units).....	23,500
Payment of subsidies.....	245,000
For maintenance of and for certain improvements at the Lakeville, North Reading, Rutland, and Westfield State sanatoria.....	1,435,300
Special appropriations under legislative acts and resolves for 1928....	6,500
Division of adult hygiene—	
For personal services.....	20,750
For other expenses.....	34,150
Cancer hospital at Norfolk—	
For maintenance.....	194,400
For care of radium after purchase.....	10,000
For construction and equipment of additional hospital facilities.....	81,700
Total.....	2,735,695

MICHIGAN**Advisory council of health:**

- C. C. Slemmons, M. D., president, Grand Rapids.
- Robert B. Harkness, M. D., Houghton.
- Chalmers J. Lyons, D. D. Sc., Ann Arbor.
- Leo J. Dretzka, M. D., Detroit.
- Louis J. Hirschman, M. D., Detroit.

Executive health officer:

- *Guy L. Kiefer, M. D., Dr. P. H., State health commissioner, Lansing.

Deputy health commissioner:

- *Don M. Griswold, M. D., Dr. P. H., Lansing.

Bureau of engineering:

- *E. D. Rich, C. E., director.
- John M. Hepler, assistant engineer.
- *Willard F. Shephard, B. S. E., assistant engineer.
- *Raymond J. Faust, assistant engineer.
- *Herbert H. Hasson, assistant engineer.
- *Orla E. McGuire, assistant engineer.
- *F. B. Ransford, water inspector.

Bureau of laboratories:

- *C. C. Young, Ph. D., Dr. P. H., director.
- *Minna Crooks, R. N., bacteriologist.
- James Bell, M. D., associate bacteriologist.
- *M. B. Kurtz, D. V. M. serologist.
- *Pearl Kendrick, bacteriologist, West Michigan division.
- *Ora Mills, bacteriologist, Houghton branch.
- *A. B. Haw, clinical pathologist.
- *Newton D. Larkum, Ph. D., immunologist.
- *Roy W. Pryor, Dr. P. H., immunologist.
- *Charles L. Bliss, toxicologist.
- *Bruce Robinson, superintendent, biologic plant.

Bureau of child hygiene and public health nursing:

- *Lillian R. Smith, M. D., director.
- *Florence H. Knowlton, M. D., physician.
- *Ida M. Alexander, M. D., prenatal consultant.
- *Helen de Spelder Moore, R. N., assistant director.

Bureau of records and statistics:

- *W. J. V. Deacon, M. D., director.

Bureau of education:

- *Marjorie Delavan, director.
- *Pearl Turner, assistant director.
- *Melita Hutzel, lecturer.

Bureau of embalming:

- *Frank J. Pienta, director.

Bureau of epidemiology:

- *Don M. Griswold, M. D., Dr. P. H., director.
- *J. R. Carter, M. D., county health units.
- *M. E. Barnes, M. D., health officer training station.
- *W. J. Murphy, M. D., field epidemiologist.
- *W. R. King, M. D., diphtheria prevention.

Bureau of mouth hygiene:

- *William R. Davis, D. D. S., director.

Bureau of industrial hygiene:

- *Frank A. Poole, M. D., director.

Appropriations for fiscal year ending June 30, 1930:

Personal services.....	\$300,000
Supplies.....	126,600
Contractual service.....	
Outlay for equipment.....	9,900
Total.....	435,900
County health departments.....	20,000
Resort and roadside water inspection.....	16,000
Stream pollution.....	10,000
Buildings, biologic farm.....	31,000
Grand total.....	512,900

Publications issued by health department:

- Monthly bulletin.
- Annual report.
- Communicable disease pamphlets.
- Sex hygiene pamphlets.
- Child hygiene pamphlets.
- Engineering bulletins.
- Mouth hygiene pamphlets.
- Scientific reprint series.
- Rules and regulations.
- Health officers' manual.

MINNESOTA**Board of health:**

- S. Marx White, M. D., president, Minneapolis.
- L. P. Wolff, C. E., vice president, St. Paul.
- C. L. Scofield, M. D., Benson.
- N. M. Watson, M. D., Red Lake Falls.
- N. G. Mortensen, M. D., St. Paul.
- O. F. Mellby, M. D., Thief River Falls.
- W. H. Barr, M. D., Wells.
- E. W. Fahey, M. D., St. Paul.
- J. A. Thabes, M. D., Brainerd.

Executive health officer, Old Capitol, St. Paul:

- *A. J. Chesley, M. D., secretary and executive officer.

Division of administration, Old Capitol, St. Paul:

- *O. C. Pierson, director.

Division of vital statistics, Old Capital, St. Paul:

- *Gerda C. Pierson, director.

Division of hotel inspection, Old Capitol, St. Paul:

- *W. A. Wittbecker, State hotel inspector.

Division of preventable diseases (including venereal diseases), university campus, Minneapolis:

- *O. McDaniel, M. D., director.
- *E. M. Wade, chief of laboratories.
- *W. P. Greene, M. D., epidemiologist.
- *John C. Veizina, M. D., epidemiologist.

Division of sanitation, university campus, Minneapolis:

- *H. A. Whittaker, director.

- *O. E. Brownell, C. E., senior sanitary engineer.

Division of child hygiene, university campus, Minneapolis:

- Everett C. Hartley, M. D., director.

- *Oliva Peterson, R. N., superintendent of public health nursing.

November 15, 1929

Appropriation for fiscal year ending June 30, 1930:

Maintenance and vital statistics—	
Salaries.....	\$32,700
Expenses.....	8,200
	—
	\$40,900
Providing free antitoxin and other biological products.....	7,675
Venereal disease.....	17,500
Sanitary engineering and laboratory....	30,000
Preventable diseases and laboratory....	62,000
Protection for maternity and infancy..	32,700
Indian health work.....	10,000
Hotel inspection.....	28,400
Total.....	229,175

Publications issued by health department:

Educational pamphlets.

MISSISSIPPI

Board of health:

W. W. Crawford, M. D., president, Hattiesburg.
 Felix J. Underwood, M. D., secretary, Jackson.
 S. E. Eason, M. D., New Albany.
 L. B. Austin, M. D., Rosedale.
 J. W. Lipscomb, M. D., Columbus.
 B. J. Shaw, M. D., State Springs.
 J. M. Dampeer, M. D., Crystal Springs.
 W. H. Watson, M. D., Brandon.
 Dudley Stennis, M. D., Newton.
 W. R. Wright, D. D. S., Jackson.

Executive health officer:

*Felix J. Underwood, M. D., executive officer,
 State board of health, Jackson.

Bureau of vital statistics:

R. N. Whittfield, M. D., director, Jackson.

Bureau of child hygiene and public health nursing:

*Felix J. Underwood, M. D., acting director,
 Jackson.

Mary D. Osborne, R. N., supervisor, public
 health nursing, Jackson.

*Oladys Eyrich, supervisor oral hygiene, Jack-
 son.

Hygienic laboratory:

T. W. Kemmerer, M. D., director, Jackson.

Bureau of sanitary engineering:

H. A. Kroese, C. E., director, Jackson.
 *Mark F. Boyd, M. D., C. P. H., director,
 bureau of malaria control.
 *N. M. Parker, D. V. S., State sanitary in-
 spector, Jackson.
 John M. Henderson, C. E., State sanitary
 inspector, Jackson.
 *A. W. Fuchs, C. E., in charge of milk investi-
 gations in State.
 *Floyd Ratliff, State sanitary inspector,
 Jackson.

Bureau of county health work:

C. C. Applewhite, M. D., director, Jackson.

Bureau of communicable diseases:

H. C. Ricks, M. D., C. P. H., director, Jackson.
 Appropriation for period January 1, 1929, to De-
 cember 31, 1929, \$184,800.

Publications issued by health department:

Biennial report.

Weekly health letters published in all news-
 papers of the State.

Health pamphlets.

MISSOURI

Board of health:

H. L. Kerr, M. D., president, Crane.
 H. S. Gove, M. D., vice president, Linn.
 James Stewart, M. D., secretary, Jefferson City.
 W. A. Clark, M. D., Jefferson City.
 Francis McCallum, M. D., Kansas City.
 Ed Sanborn Smith, M. D., Kirksville.
 Horace W. Carle, M. D., St. Joseph.

Executive health officer:

*James Stewart, M. D., State health commis-
 sioner, Jefferson City.
 *Irl Brown Krause, M. D., assistant State
 health commissioner, Jefferson City.

Epidemiology:

*R. L. Russell, M. D., assistant epidemiologist.

Laboratories:

*R. L. Laybourn, bacteriologist.

Sanitary engineering:

*W. Scott Johnson, chief engineer.

Vital statistics:

*Ross Hopkins, M. D., statistician.

Child hygiene and cooperative county health work:

*Irl Brown Krause, M. D., director.

Public health nursing:

*Pearl McIver, R. N., director.

Appropriations for biennial period ending Decem-
 ber 31, 1930:

Board of health—

Licensure	\$40,000
Salaries.....	86,000
Contingent.....	42,000
Public health fund.....	159,500
Laboratories and prevention of blindness.....	50,000
Total.....	377,500

MONTANA

Board of health:

E. M. Porter, M. D., president, Great Falls.
 E. G. Balsum, M. D., vice president, Billings.
 George M. Jennings, M. D., Missoula.
 L. H. Fligman, M. D., Helena.
 B. L. Pampel, M. D., Livingston.

Executive health officer:

*W. F. Cogswell, M. D., secretary, Helena.

Division of communicable diseases:

J. H. Crouch, M. D., epidemiologist, Helena.

Division of child welfare:

*MaBelle True, M. D., director, Helena.

Division of food and drugs:

Glen D. Wiles, director, Helena.

*Vance Erickson, chemist, Helena.

Division of vital statistics:

*W. F. Cogswell, M. D., State registrar, Helena.

*L. L. Benepe, deputy State registrar, Helena.

Division of water and sewage:

H. B. Foote, director, Helena.

W. M. Cobleigh, consultant, Bozeman.

*Jacob W. Forbes, analyst, Helena.

Hygienic laboratory:

*Fred D. Stimpert, director, Helena.

*Edith Kuhs, technician, Helena.

E. D. Hitchcock, M. D., consulting bacteri-
 ologist, Great Falls.

Appropriations for the years ending—

	June 30, 1930	June 30, 1931
Salaries.....	\$31,000	\$31,000
Operating expenses.....	17,300	17,300
Capital repairs and replacements.....	2,000	2,000
Division of child welfare.....	15,000	15,000
Board of entomology (Rocky Mountain spotted fever work).....	25,000	25,000
Total.....	90,300	90,300

Other sources of revenue:

Fees (about).....	\$12,000
Rockefeller Foundation.....	3,650

Publications issued by health department:

Special bulletins on communicable diseases.
Biennial report.

NEBRASKA

Department of public welfare:

Ernest M. Pollard, secretary, Lincoln.

Bureau of health—

Executive health officer—

*P. H. Bartholomew, M. D., director of public health, Lincoln.

Collaborating epidemiologist—

*P. H. Bartholomew, M. D., Lincoln.

Bacteriologist—

*L. O. Vose, Lincoln.

Division of venereal diseases—

*P. H. Bartholomew, M. D., director, Lincoln.

Statistician—

*Esther L. Stern, Lincoln.

Division of child hygiene—

*Bertha Riesland, chief clerk, Lincoln.

Medical examining board—

W. R. Boyer, M. D., Pawnee City.
H. J. Lehnhoff, M. D., Lincoln.

E. T. McGuire, M. D., Mead.

Appropriations for biennial period ending June 30, 1931—

Salaries.....	\$40,000
Maintenance.....	22,000
Total.....	62,000

NEVADA

State board of health:

F. B. Balzar, governor, president, Carson City.

Edward E. Hamer, M. D., secretary and State health officer, Carson City.

W. G. Greathouse, secretary of State.

John Fuller, M. D., Reno.

A. J. Hood, M. D., Reno.

Executive health officer:

Edward E. Hamer, M. D., Carson City.

State hygienic laboratory at State university:

*Vera E. Lautenschlager, acting director, Reno.

Appropriations for 1927 and 1928:

Salary of secretary.....	\$5,000
For State board of health.....	5,100
For purchase of diphtheria antitoxin for free distribution.....	500
For bureau of vital statistics.....	500
Total.....	11,100

Publications issued by health department:

Biennial report.
Special bulletins.

NEW HAMPSHIRE

Board of health:

Robert Fletcher, C. E., president, Hanover.
D. E. Sullivan, M. D., Concord.

George C. Wilkins, M. D., Manchester.

Sibley G. Morrill, M. D., Concord.

Charles W. Tobey, governor.

Ralph W. Davis, attorney general, Manchester.

Executive health officer:

*Charles Duncan, M. D., secretary State board of health, Concord.

*Harriet I. Parkhurst, chief clerk, Concord.

Division of maternity, infancy, and child hygiene:

*Mary D. Davis, R. N., director and supervising nurse, Manchester.

Department of vital statistics:

*Charles Duncan, M. D., registrar, Concord.

*Bertha M. Watson, chief clerk, Concord.

Division of chemistry and sanitation:

*Charles D. Howard, chief of division, Concord.

*Burns Robbins, assistant chemist, Concord.

*Reginald B. Adams, assistant chemist and bacteriologist, Concord.

*Leonard W. Trager, assistant sanitary engineer, Concord.

*Joseph X. Duval, chief inspector, Concord.

Diagnostic and pathological department—

*William R. Macleod, serologist and diagnostic bacteriologist, Concord.

H. N. Kingsford, M. D., pathologist, Hanover.

*Ben. Jewell, assistant in pathological laboratory, Concord.

Venereal disease division:

*Charles A. Weaver, M. D., Manchester.

Appropriations for fiscal year ending June 30, 1930:

State board of health.....	\$30,150
Laboratory of hygiene.....	17,300
Vital statistics.....	3,750
Total.....	71,200

Publications issued by health department:

Bulletin.
Biennial report.

NEW JERSEY

Board of health:

Charles I. Lafferty, president, Atlantic City.

Harold J. Harder, C. E., vice president, Paterson.

David D. Chandler, Newark.

November 15, 1930

Board of health—Continued.

H. E. Winter, V. M. D., Plainfield.
 J. Oliver McDonald, M. D., Trenton.
 S. A. Cosgrove, M. D., Jersey City.
 Mrs. Helen M. Berry, Newark.
 Margaret McNaughton, Jersey City.
 J. E. H. Guthrie, D. D. S., Newark.
 J. Lynn Mahaffey, M. D., Camden.
 Frank S. Tainter, C. E., Far Hills.

Executive health officer:

*David C. Bowen, director of health, Trenton.

Bureau of bacteriology:

*John V. Mulcahy, chief, Trenton.

Bureau of chemistry:

*John E. Bacon, chief, Trenton.

Bureau of administration:

*Charles J. Merrell, chief, Trenton.

Bureau of food and drugs:

*Walter W. Scofield, chief, Trenton.

Bureau of child hygiene:

Julius Levy, M. D., consultant, Trenton.

Bureau of local health administration:

*David C. Bowen, chief, Trenton.

Bureau of engineering:

*H. P. Croft, chief, Trenton.

Bureau of vital statistics:

*David S. South, chief, Trenton.

Bureau of venereal disease control:

A. J. Casselman, M. D., consultant, Trenton.

Appropriations for fiscal year ending June

30, 1930:

Salaries.....	\$201,470
Miscellaneous.....	63,550
Child hygiene.....	123,023
Venereal disease control.....	28,935
Total.....	416,978

Publications issued by health department:

Monthly bulletin.

Annual report.

NEW MEXICO

Board of public welfare:

Mrs. Francis C. Wilson, president, Santa Fe.
 R. O. Brown, M. D., secretary, Santa Fe.
 Mrs. A. M. Shortle, Albuquerque.
 R. R. Ryan, Albuquerque.
 H. A. Miller, M. D., Clovis.

Executive health officer:

*G. S. Luckett, M. D., director of public health, Santa Fe.

Division of preventable diseases:

*G. S. Luckett, M. D., chief, Santa Fe.

Division of sanitary engineering and sanitation:

*Paul S. Fox, M. S. in C. E., chief, Santa Fe.

Division of public health nursing and child hygiene:

*Edith Hodgson, R. N., chief, Santa Fe.

Division of county health work:

Public health laboratory:

*Myrtle Greenfield, M. S., chief, Albuquerque.
 State registrar:

*Billy Tober, Santa Fe.

Appropriation for years 1930 and 1931, per annum, \$38,400. Fiscal year ends June 30.

NEW YORK

Public health council:

Simon Flexner, M. D., LL. D., chairman,
 New York.

Homer Folks, LL. D., vice chairman, Yonkers.
 Edward H. Marsh, M. D., secretary, Albany.

Henry N. Ogden, C. E., Ithaca.

Frederick F. Russell, M. D., New York.

Jacob Goldberg, M. D., Buffalo.

Stanton P. Hull, M. D., Petersburg.

Matthias Nicoll, Jr., M. D. (ex officio) commissioner of health, Albany.

Executive health officer:

*Matthias Nicoll, Jr., M. D., commissioner of health, Albany.

Deputy commissioner of health:

*Paul B. Brooks, M. D., Albany.

Secretary:

*Edward H. Marsh, M. D., Dr. P. H., Albany.

Executive officer:

*Fenimore D. Beagle, Albany.

Division of public-health education:

*B. R. Rickards, director, Albany.

Division of sanitation:

*Charles A. Holmquist, C. E., director,
 Albany.

Division of vital statistics:

*Joseph V. De Porte, Ph. D., director, Albany.

Division of child hygiene:

*Elizabeth M. Gardiner, M. D., director,
 Albany.

Division of communicable diseases:

*Edward S. Godfrey, M. D., director, Albany.

Division of tuberculosis:

*Robert Phinnett, M. D., director, Albany.

Division of social hygiene:

*Albert Pfeiffer, M. D., director, Albany.

Division of laboratories and research:

*Augustus B. Wadsworth, M. D., director,
 Albany.

Division of public-health nursing:

*Mathilde S. Kuhlman, R. N., director,
 Albany.

Institute for the study of malignant disease, Buffalo:

*Burton T. Simpson, M. D., director.

Appropriations for fiscal year ending June 30, 1930:

Personal services.....	\$1,175,340.00
Maintenance and operation.....	533,100.00
For State aid to county laboratories.....	110,000.00
Investigation of oyster beds.....	5,000.00
State aid to county health activities.....	167,037.54
Physically handicapped children.....	30,000.00
For repairs to old buildings.....	21,600.00
Total.....	2,042,077.54

(Appropriation of \$204,950 for construction of addition to laboratory building included above.)

Other sources of revenue:

Fees from certified transcript of birth, death, and marriage certificates, \$1,774.20 per annum.

Licensing laboratories, \$456.

Sale of serums, \$1,591.62.

Licensing of embalmers and undertakers, \$13,138.50.

Publications issued by health department:

Weekly Health News.
Monthly Vital Statistics Review.
Annual report.

NORTH CAROLINA

Board of health:

A. J. Crowell, M. D., Charlotte, president.
Thomas E. Anderson, M. D., Statesville.
E. J. Tucker, D. S. S., Roxboro.
Cyrus Thompson, M. D., Jacksonville.
D. A. Stanton, M. D., High Point.
James P. Stowe, Ph. G., Charlotte.
John B. Wright, M. D., Raleigh.
L. E. McDaniel, M. D., Jackson.
Charles C. Orr, M. D., Asheville.

Executive health officer:

*Charles O'H. Laughinghouse, M. D., secretary-treasurer and State health officer, Raleigh.
*Ronald B. Wilson, assistant to the secretary, Raleigh.

Laboratory of hygiene:

C. A. Shore, M. D., director, Raleigh.

Deputy State registrar:

*F. M. Register, M. D., Raleigh.

Bureau of engineering and inspection:

*H. E. Miller, C. E., director, Raleigh.

Bureau of maternity and infancy:

*George Collins, M. D., director, Raleigh.

Bureau of health education:

*G. M. Cooper, M. D., director, Raleigh.

Bureau of county health work:

*C. N. Sisk, M. D., director, Raleigh.

Bureau of epidemiology:

*H. A. Taylor, M. D., director, Raleigh.

Bureau of life extension:

*Frederick R. Taylor, M. D., director, High Point.

Appropriations for fiscal year ending June 30, 1930:

Administration.....	\$29,745
Vital statistics.....	25,630
Laboratory of hygiene.....	68,000
School inspection.....	58,980
County health work.....	123,415
Epidemiology.....	10,490
Maternity and infancy.....	50,580
Engineering and inspection.....	75,720
Health education.....	11,410
Life extension.....	9,100
Printing.....	20,900
Orthopedic clinics.....	5,000
Cancer control.....	2,500
Total.....	491,470

Other sources of revenue:

Special fees, \$49,800.

Publications issued by health department:

Monthly bulletin: The Health Bulletin.
Special bulletins.
Biennial report.

NORTH DAKOTA

Advisory health council:

Bertha R. Palmer, superintendent public instruction, ex officio, Bismarck.

Advisory health council—Continued.

Fannie Dunn Quain, M. D., president North Dakota Tuberculosis Association, ex officio, Bismarck.

Arne Oftedal, M. D., Fargo.

Ella Clayton Smyth, Bismarck.

R. S. Towne, D. D. S., Bismarck.

Executive health officer:

*A. A. Whittemore, M. D., state health officer, Bismarck.

Child hygiene and public health nursing:

*Maysil M. Williams, M. D., director, Bismarck.

Bureau of venereal diseases:

*J. D. Jungman, M. D., Bismarck.

Bureau of sanitary engineering:

A. L. Bavone.

Bureau of vital statistics:

*Myrtle C. Lee, director.

Appropriations for biennial period ending June 30, 1931:

For public health—

Salary.....	\$7,200
Clerk hire.....	23,200
Postage.....	1,000
Supplies.....	1,500
Furniture and fixtures.....	1,000
Printing.....	3,000
Miscellaneous.....	1,000
Travel.....	1,500
Card indexing.....	2,500

For division of child hygiene and public health nursing—

Salary.....	6,000
Clerk hire.....	9,600
Postage.....	3,000
Supplies.....	200
Furniture and fixtures.....	100
Printing.....	4,000
Miscellaneous.....	100
Travel.....	3,000

OHIO

Public health council:

Chas. A. Neal, M. D., chairman, Columbus.

James E. Bauman, secretary.

G. D. Lummis, M. D.

C. O. Probst, M. D.

R. M. Calfee.

W. I. Jones, D. D. S.

Executive health officer:

*Chas. A. Neal, M. D., director of health, Columbus.

Assistant director of health:

*James E. Bauman.

Division of administration:

*James E. Bauman, chief.

*C. A. Orrison, chief clerk.

Bureau of publicity—

*Paul Mason, director.

Bureau of local health organization—

*E. R. Shaffer, M. D., chief.

Division of communicable diseases:

*T. W. Mahoney, M. D., chief epidemiologist.

November 15, 1929

Division of communicable diseases—Continued.

Bureau of venereal diseases—
 *Finley Van Orsdall, M. D., chief.
 Bureau of trachoma clinics—

Division of sanitary engineering:

*F. H. Waring, chief.
 Bureau of plumbing inspection—
 *A. A. Manchester, chief.

Division of vital statistics:

*Irvin C. Plummer, chief.

Division of laboratories:

Leo F. Ey, chief.
 Division of hygiene:
 *J. A. Frank, M. D., chief.
 Bureau of tuberculosis—
 H. M. Austin, M. D., chief.
 Bureau of hospitals—
 *Pearl G. Thompson, chief.

Division of child hygiene:

Bureau of public health education—
 *A. B. Lippert, M. D., chief.
 Division of public health nursing:
 *Zoe McCaleb, R. N., chief.
 Division of industrial hygiene:
 *B. E. Neiswander, M. D., chief.
 E. R. Hayhurst, M. D., consultant.
 Appropriations for 12 months ending December 31, 1929:

Personal services.....	\$230,000
Maintenance.....	158,073
State aid for health districts.....	250,000
Total.....	638,073

Publications issued by health department:
 Ohio Health News (semimonthly).

OKLAHOMA

Executive health officer:
 *Glyde W. Beson, M. D., State health commissioner, Oklahoma City.
 Assistant State health commissioner:
 *J. P. Folan, Oklahoma City.
 Bureau of vital statistics:
 *N. H. Moore.
 Bureau of laboratories:
 *D. T. Bowden, M. D., director of laboratory.
 Bureau of maternity and infancy:
 *Mable Sherin, director.
 Bureau of venereal disease control:
 A. M. Young, M. D., director.
 Bureau of rural sanitation:
 *D. T. Bowden, M. D., director.
 Bureau of sanitary engineering:
 *H. J. Darcey, director.
 Bureau of public health education:
 *G. Harrison, director.
 Bureau of dental health education:
 *Pearl E. Wilson, R. N.

Bureau of epidemiology:

*G. F. Mathews, M. D.

Appropriations for fiscal year ending June 30, 1930:

Administration—	
Commissioner.....	\$4,800
Assistant commissioner.....	2,400
Secretary and stenographer.....	1,800
Book keeper.....	2,000
Stenographers (1 at \$1,800, 1 at \$1,500, and 1 at \$1,200).....	4,500
Bureau of public health education—	
Director.....	2,400
Stenographer.....	1,500
Bureau of diagnostic laboratory—	
Chemist.....	3,000
Assistant chemist.....	2,400
Bacteriologist.....	3,000
Assistant bacteriologist.....	2,400
Record clerk.....	1,800
Extra help—janitor.....	1,200
Manufacture vaccine.....	2,500
Bureau of sanitary engineering—	
Engineer.....	3,000
Bureau of pure food, drugs, and sanitary inspection—	
Supervisor (sanitary engineer).....	2,400
Inspectors (6 at \$1,800 each).....	10,800
Bureau of vital statistics—	
Registrar.....	2,400
Assistant registrar.....	1,800
Statistical clerks (3 at \$1,500 each).....	4,500
Bureau of maternity and infancy—	
Director.....	3,000
Stenographer.....	1,500
Head nurse.....	2,400
Field nurses (4 at \$1,800 each).....	7,200
Printing, office supplies, and communications.....	7,000
Extra help to hold child health conferences and prenatal clinics, including mailing clerk.....	5,000
Traveling expenses, including motor supplies and motor repairs...	5,000
Travel, all departments.....	17,500
Communication.....	3,000
Printing.....	3,500
Other expenses.....	2,100
Office supplies.....	1,200
Medical supplies.....	7,000
Office equipment.....	750
Laboratory equipment.....	900
Motor-vehicle exchange.....	1,000
Special appropriations unallocated:	
Control of venereal diseases.....	10,800
Epidemiology, disease prevention.....	5,000
Rural sanitation and disease control in the rural districts and county health units.....	35,000
Malaria control.....	10,000
Total.....	189,450

OREGON

Board of health:

Harold C. Bean, M. D., president, Portland.
 W. B. Morse, M. D., vice president, Salem.
 Frederick D. Stricker, M. D., secretary and
 State health officer, Portland.
 C. J. Smith, M. D., Portland.
 J. H. Rosenberg, M. D., Prineville.
 George E. Houck, M. D., Roseburg.
 W. T. Phy, M. D., Hot Lake.

Executive health officer:

*Frederick D. Stricker, M. D., secretary and
 State health officer, Portland.

Registrar of vital statistics:

*Frederick D. Stricker, M. D., Portland.

Division of child hygiene and public health nursing:

*Glendora Blakely, R. N., Portland.

Director of laboratory:

*William Levin, D. P. H., Portland.

Appropriations for fiscal year ending December 31,
 1929, \$45,212.

Publications issued by health department:

Annual report.

Biennial report.

Pamphlets and posters.

Weekly letter.

PENNSYLVANIA

Department of health:

Advisory board—

Theodore B. Appel, M. D., chairman.
 H. C. Frontz, M. D., Huntingdon.
 J. M. Wainwright, M. D., Scranton.
 A. A. Cairns, M. D., Philadelphia.
 S. R. Haythorn, M. D., Pittsburgh.
 C. B. Auel, M. E., East Pittsburgh.
 Charles F. Mebus, C. E., Glenside.

Sanitary water board—

Theodore B. Appel, M. D., chairman.
 Charles E. Dorworth, secretary of forests
 and waters, Bellefonte.
 Nathan R. Buller, commissioner of fish-
 eries, Pleasant Mount.
 P. T. Davis, Clearfield.
 Sumner B. Ely, Pittsburgh.
 George S. Webster, Philadelphia.
 W. L. Stevenson, chief engineer and secre-
 tary, Harrisburg.

Executive health officers—

*Theodore B. Appel, M. D., secretary of
 health, Harrisburg.
 *J. Bruce McCreary, M. D., deputy secre-
 tary of health, Shippensburg.

Sanatoria and clinics—

Section State clinics—
 *William C. Miller, M. D., Mechanics-
 burg.

Mont Alto sanatorium—

*R. H. McCutcheon, M. D., medical
 director, South Mountain.

Cresson sanatorium—

*T. H. A. Stites, M. D., medical direc-
 tor, Cresson.

Hamburg sanatorium—

*Henry A. Gorman, M. D., medical
 director, Hamburg.

Department of health—Continued.

Bureau of communicable diseases—

*J. Moore Campbell, M. D., Harrisburg.

Section of epidemiology—

*Harold B. Wood, M. D.

*F. E. Coughlin, M. D.

Genito-urinary section—

*Edgar S. Everhart, M. D., Lemoyne.

Section of restaurant hygiene—

*Howard M. Haines, Harrisburg.

Bureau of sanitary engineering—

*W. L. Stevenson, C. E., chief engineer,
 Harrisburg.

Section of waterworks and sewerage—

*H. E. Moses, Harrisburg.

Section of roadside water supplies—

*Henry P. Drake.

Section of housing—

*H. F. Bronson, C. E., Harrisburg.

Section of nuisances—

*D. V. Ness.

Section milk control—

*Ralph E. Irwin, Camp Hill.

Section industrial waste—

*F. E. Daniels, M. A., Harrisburg.

Child health—school control—

Field supervision—

*C. W. Sheldon, M. D.

School sanitation—

*John G. Ziegler, Lebanon.

Preschool section—

*Mary Riggs Noble, M. D., Harrisburg.

Dental hygiene—

*C. J. Hollister, D. D. S., Harrisburg.

Bureau of finance—

*Clinton T. Williams, Harrisburg.

Section of accounts—

*E. J. MacNamara.

Section of supplies—

*Roy G. Miller, Harrisburg.

Bureau of vital statistics—

*Emlyn Jones, M. D., Johnstown.

*George B. L. Arner, statistician.

Bureau of laboratories—

*John L. Laird, M. D., Philadelphia.

Bureau of drug control—

*James N. Lightner, LL. B., Lancaster.

Bureau of nursing—

*Alice M. O'Halloran, R. N., Harrisburg.

Bureau of inspection—

*James Duffy, Marietta.

Bureau of public health education—

*J. C. Funk, LL. B., Harrisburg.

Appropriations for biennial period

ending May 31, 1931:

General health purposes and maintenance of sanatoria.....	\$3,266,500
Furnishings and equipment for hospital for crippled children.....	233,000
Sanitary water board.....	186,000
Construction for Mont Alto, Cresson, and Hamburg sana- toria.....	975,000
Total.....	6,662,500

November 15, 1929

PHILIPPINE ISLANDS

Director of health:

Jacobo Fajardo, M. D., Manila.

Council of hygiene, advisory board to the director of health:

Fernando Calderon, M. D., president, Manila.
 Regino G. Padua, M. D., secretary, Manila.
 José Fabella, M. D., Manila.
 Gervasio Ocampo, M. D., Manila.
 José Albert, M. D., Manila.
 Benito Valdes, M. D., Manila.
 Eulogio P. Revilla, LL. B., Manila.
 Vicente Genato, Manila.

Executive officer:

*Jacobo Fajardo, M. D., director of health, Manila.

Assistant to the director:

*Regino G. Padua, M. D., Manila.

Office of records and finance:

*Mamerto Tiano, chief, Manila.

Office of property:

*Bonifacio Mencias, M. D., acting chief, Manila.

Office of vital statistics:

*José Guidote, M. D., chief, Manila.

Office of general inspection:

*Rafael Villafranca, M. D., chief, Manila.

Public health education and publicity:

*José P. Bantug, M. D., chief, Manila.

Public health nursing:

*Rosario Pastor, M. D., chief, Manila.

Division of communicable diseases:

*Leonic Lopez Rizal, M. D., chief, Manila.

Division of metropolitan sanitation:

*Eugenio Hernando, M. D., chief, Manila.

Division of hospitals, dispensaries, and laboratories:

*Eusebio D. Aguilar, M. D., chief, Manila.

Leprosy section—

*Vicente Kierulf, M. D., chief.

Culion Leper Colony:

*Sulpicio Chiyuto, M. D., chief, Manila.

Division of provincial sanitation:

*Gabriel Intengan, M. D., chief, Manila.

Division of malaria control:

*Cristobal Manlang, M. D., chief.

*Antonio Ejercito, M. D., assistant chief.

Division of sanitary engineering:

*Manuel Mafiosa, C. E., chief, Manila.

Appropriations for fiscal year ending December 31, 1929:

Salaries and wages.....	\$501,493
Miscellaneous expenses.....	985,887
Furniture and equipment.....	11,250
Total.....	1,498,630

Special expenses—

Continuation of treatment and diagnosis of lepers.....	125,000
Maintenance of regional treatment stations, etc.....	62,500
Aid to specially organized provinces.....	270,550
Aid to the Province of Ilocos Sur for the operation, maintenance, and equipment of the Cervantes hospital.....	10,000
School of nursing in Baguio.....	5,250

Appropriations for fiscal year ending December 31, 1929—Continued.

Special expenses—Continued.

Medicines, medical and surgical supplies for distribution to public school dispensaries.....	\$5,000
General demonstration on a small scale of the practical control of beriberi.....	5,000
Contribution to the University of the Philippines for the operation of the School of Sanitation and Public Health.....	20,000
Control of malaria in the regularly and specially organized Provinces and municipalities and municipal districts.....	37,000
Total for special expenses.....	540,300

Grand total of appropriations 2,038,930

Publications issued by the Philippine health service:

Daily Service News.
 Weekly comparative epidemiological résumé.
 Weekly résumé of births and deaths.
 Monthly bulletin.
 Annual report.
 Occasional pamphlets.

PORTO RICO

Department of health:

*Pedro N. Ortiz, M. D., commissioner of health, San Juan.
 *A. Fernós Isern, M. D., assistant commissioner, San Juan.

Insular board of health:

A. Fernós Isern, M. D., chairman, San Juan.
 Donald C. Cook, San Juan.
 W. A. Glines, M. D., San Juan.
 Pablo Morales Otero, M. D., San Juan.
 G. A. Ramirez de Arellano, San Juan.
 M. Roses Artau, M. D., San Juan.
 A. Ortiz Toro, San Juan.
 Luis B. de la Vega, M. D., secretary, San Juan.

Division of property and accounts:

*Abelardo Santiago, chief, San Juan.

Division of sanitary engineering:

*Octavio Marcano, sanitary engineer, San Juan.

Bacteriological laboratory:

*Oscar Costa Mandry, M. D., director, San Juan.

Chemical laboratory:

*R. del Valle Sárraga, chemist, director, San Juan.

Division of transmissible diseases:

*M. O. de la Rosa, M. D., chief, San Juan.

*E. Garrido Morales, M. D., epidemiologist, San Juan.

Bureau of statistics:

*Manuel A. Pérez, chief, San Juan.

Appropriations for the fiscal year ending June 30, 1930:

Office of the commissioner of health.....	\$276,757.70
Leper hospital.....	34,166.50
Quarantine hospital.....	12,684.00

Appropriations for the fiscal year ending June 30, 1930—Continued.

Antituberculosis sanatorium of Porto Rico.....	137,228.00
Blind asylum.....	41,060.00
Institute for blind children.....	27,270.00
Insane asylum.....	155,000.00
Education and maintenance of poor deaf and dumb children.....	4,000.00
Care of tubercular patients in the sanatorium at Ponca under the control of the department of health.....	15,000.00
Control and suppression of tuberculosis.....	60,000.00
Control and prevention of venereal diseases.....	12,000.00
Prevention of infantile mortality.....	25,000.00
Extermination of mosquitoes and control and suppression of malaria.....	50,000.00
Suppression of anemia.....	100,000.00
Extermination of rats.....	5,000.00
Control and suppression of infantile tetanus and ophthalmia neonatorum.....	2,000.00
Equipment and maintenance of district hospitals.....	60,000.00
Emergency fund for the control and suppression of epidemics.....	10,000.00
Girls' charity school.....	84,178.00
Boys' charity school.....	111,231.00
Sanitation fund trust fund.....	168,050.48
Total.....	1,390,625.68

RHODE ISLAND

Board of health:

William F. Williams, M. D., president, Bristol.
Joseph M. Bennett, M. D., vice president, Providence.
Thomas J. McLaughlin, M. D., Woonsocket.
John Champlin, Jr., M. D., Westerly.
Berton W. Storrs, M. D., Portsmouth.
M. S. Budlong, M. D., Providence.
R. Morton Smith, M. D., Riverpoint.

Executive health officer:

*B. U. Richards, M. D., secretary, State board of health, State commissioner of health, and State registrar, Statehouse, Providence.

Pathologist:

Lester A. Round, Ph. D., Providence.

Chemist:

Stephen De M. Gage, Providence.

Appropriations for fiscal year ending Nov. 30, 1928:

Executive department.....	\$36,425
Chemical laboratory.....	25,905
Pathological laboratory.....	25,550
Child welfare.....	10,200
Venereal diseases.....	9,220
Total.....	107,300

SOUTH CAROLINA

Executive committee, board of health:

Robert Wilson, Jr., M. D., chairman, Charleston.
L. D. Boone, M. D., Aiken.
Davis Furman, M. D., Greenville.
E. A. Hines, M. D., Seneca.
W. R. Wallace, M. D., Chester.
William Egleston, M. D., Hartsville.
J. Lee Carpenter, Ph. G., Greenville.
F. M. Routh, M. D., Columbia.
George Dick, D. D. S., Sumter.
John M. Daniel, Atty. Gen., Columbia.
A. J. Beattie, Compt. Gen., Columbia.

Executive health officer:

*James A. Hayne, M. D., State health officer, Columbia.

Department of county health units:

*Ben F. Wyman, M. D., director, Columbia.

Bureau of child hygiene:

*Nellie Cunningham, R. N., supervisor of public health nursing, Columbia.

Laboratory department:

*H. M. Smith, M. D., in charge, Columbia.

*J. R. Cain, chief bacteriologist, Columbia.

Bureau of vital statistics:

*C. W. Miller, chief clerk, Columbia.

Bacteriologist and chemist:

F. L. Parker, Jr., M. D., Ph. D., Columbia.

South Carolina Sanitorium:

*Ernest Cooper, M. D., superintendent, Columbia.

Epidemiologist:

*A. H. Hayden, M. D., Columbia.

Sanitary engineer:

*A. E. Legare, C. E., Columbia.

Appropriations for fiscal year ending December 31, 1929:

Administrative office.....	\$12,275.30
Control of epidemic diseases.....	48,920.00
Bureau of child hygiene.....	9,670.00
Bureau of vital statistics.....	8,365.00
Laboratory.....	12,800.00
Bureau of rural sanitation.....	43,337.50
Division of sanitary engineering.....	12,600.00
Tuberculosis sanatoria.....	106,145.00
Aid for crippled children.....	12,400.00
Child-placing bureau.....	16,713.00
Total.....	283,955.80

Publications issued by health department:

Annual report.

Bulletins of various departments.

SOUTH DAKOTA

Board of health:

A. C. Clark, M. D., president, Woonsocket.
H. J. Bartron, M. D., vice president, Watertown.
H. R. Kenaston, M. D., Bonesteel.
N. T. Owen, M. D., Rapid City.
P. B. Jenkins, M. D., superintendent, Waubay.

November 15, 1929

Executive health officer:

*Park B. Jenkins, M. D., Waubay.

Division of vital statistics:

*Park B. Jenkins, M. D., Waubay.

Division of records and accounts:

*Edna Jenkins.

Division of medical licensure:

H. R. Kenaston, M. D.

Laboratories (at Vermilion):

J. C. Ohlmacher, M. D.

Division of child hygiene:

*Florence E. Walker, R. N.

Division of epidemiology:

*A. E. Bostrom, M. D.

Division of sanitary engineering:

*W. W. Towne, B. E.

	1929-30	1930-31
Appropriations:		
Salaries and wages.....	\$21,500	\$21,500
Supplies and materials.....	2,500	2,500
Communication and travel.....	4,000	4,000
Printing, binding, and advertising.....	2,000	2,000
Light and power.....	250	250
Rents.....	1,500	1,500
Crippled children.....	2,500	2,500
Dues.....	50	50
Maternity and infancy work.....	5,000	5,000
Total.....	39,360	39,360

TENNESSEE**Department of public health.**

*E. L. Bishop, M. D., C. P. H., commissioner, Nashville.

Division of epidemiology:

*H. C. Stewart, M. D., C. P. H., director, Nashville.

Division of local organization:

*W. K. Sharp, Jr., M. D., director, Nashville.

Division of vital statistics:

*J. B. Bond, M. D., director, Nashville.

Division of laboratories:

*William Litterer, M. D., director, Nashville.

Division of sanitary engineering:

*Roy J. Morton, C. E., director, Nashville.

Division of health education:

*H. S. Mustard, M. D., director, Nashville.

Division of child hygiene and public health nursing:

*W. J. Breeding, M. D., director, Nashville.

*Miss M. G. Nisbet, R. N., State supervising nurse, Nashville.

Division of tuberculosis control:

*M. F. Haygood, M. D., C. P. H., director, Nashville.

Appropriation for the fiscal period July 1,**1929, to June 30, 1931:**

General administration.....	\$40,200
Vital statistics.....	37,600
Sanitary engineering.....	51,300
Laboratories.....	67,840
Health education.....	14,400
Epidemiology.....	59,000
Local organization.....	285,600
Child hygiene and public health nursing.....	120,200
Tuberculosis control.....	90,000
Total.....	766,140

Other sources of revenue:

United States Department of Labor, maternity and child welfare, \$25,767.55 per annum. (Cooperation with Department of Labor ended June 30, 1929.)

International Health Board, \$22,500, (variable) per annum.

International Health Board, cooperation in malaria control, epidemiology, and local organization, vital statistics. United States Public Health Service in malaria control. Individual counties and cities in State cooperation in malaria control, county health work, and child hygiene and public health nursing. United States Public Health Service, cooperation in county health work, \$18,000 per annum.

TEXAS**Board of health:**

J. M. Frazier, M. D., Belton.

Joseph S. Wooten, M. D., Austin.

A. A. Ross, M. D., Lockhart.

Joe Gilbert, M. D., Austin.

C. M. Rosser, M. D., Dallas.

E. W. Wright, M. D., Bowie.

J. C. Anderson, M. D., ex officio, State health officer.

Executive health officer:

*J. C. Anderson, M. D., State health officer, Austin.

Bureau of child hygiene:

*H. N. Barnett, M. D., director.

Bureau of vital statistics:

*W. A. Davis, M. D., director.

Bureau of communicable diseases and hygienic laboratory:

S. W. Bohls, M. D., director.

Bureau of sanitary engineering:

*V. M. Ehlers, C. E., director.

Bureau of pure foods and drugs:

*E. G. Le May, director.

Appropriations for fiscal years 1929 and 1931, \$200,520 per annum.**UTAH****Board of health:**

Joseph R. Morrell, M. D., president, Ogden.

T. B. Beatty, M. D., secretary, Salt Lake City.

C. E. McDermid, M. D., Castle Gate.

Carl Hopkins, Ogden.

W. D. Donoher, M. D., Salt Lake City.

R. A. Hart, C. E., Salt Lake City.

Barnet E. Bonar, M. D., Salt Lake City.

Executive health officer:

*T. B. Beatty, M. D., State health commissioner, Salt Lake City.

Bureau of vital statistics:

*T. B. Beatty, M. D., State registrar.

*Anna M. Bowen, deputy registrar.

Bureau of child hygiene:

*T. B. Beatty, director.

Epidemiologist:

*A. C. McKean, M. D.

Sanitary engineer:

*Leonard H. Male.

Bacteriological laboratory:

*E. H. Bramhall, bacteriologist.

Appropriations for two years ending

June 30, 1931:	
Salaries.....	\$42,456
Office expenses.....	8,000
Travel.....	3,300
Equipment.....	500
Child hygiene (to match Federal funds).....	13,000
Total.....	67,256

Publications issued by health department:

Quarterly bulletin.
Biennial report.

VERMONT

Board of health:

Edward J. Rogers, M. D., chairman, Pittsford.
William G. Ricker, M. D., St. Johnsbury.
John P. Gifford, M. D., Randolph.

Executive health officer:

*Charles F. Dalton, M. D., secretary, State board of health, Burlington.

Laboratory of hygiene:

*Charles F. Whitney, M. D., director, Burlington.

Sanitary engineering:

J. W. Votey, C. E., Burlington.

Sanitary inspector:

*Fred S. Kent, M. D., Burlington.

Division of communicable diseases:

*Fred S. Kent, M. D., Burlington.

Division of tuberculosis:

*H. W. Slocum, Burlington.

Division of poliomyelitis:

*W. L. Aycock, M. D., research, Burlington.

Lillian E. Kron, R. N., Burlington.

Division of maternal and infant hygiene:

*Nellie M. Jones, R. N., Maternity, infancy, and child hygiene nurse.

Appropriations for fiscal year ending June 30, 1930:

Total budget, \$45,000.

Other sources of revenue:

Private donations for study and treatment of infantile paralysis.

Publications issued by health department:

Biennial report.

VIRGINIA

Board of health:

W. T. Graham, M. D., president, Richmond.
Mrs. W. M. Smith, Purcellville.
Frank Darling, Hampton.
J. A. McGuire, M. D., Norton.
Guy R. Harrison, D. D. S., Richmond.
George B. Lawson, M. D., Roanoke.
L. T. Royster, M. D., University.

Executive health officer:

*Ennon G. Williams, M. D., State health commissioner, Richmond.

Assistant health commissioner and director of rural health work:

*Roy K. Flanagan, M. D., Richmond.
*C. R. Kelley, associate director of rural health work.

Registrar of vital statistics:

*W. A. Plecker, M. D., Richmond.

Bacteriologist:

*G. F. McGinnis, M. D., Richmond.

Sanitary engineer:

Richard Messer, C. E., Richmond.

Bureau of child welfare:

*Mary E. Brydon, M. D., Richmond.

Director public health nursing:

*Nannie J. Minor, R. N., Richmond.

Director mouth hygiene:

*N. Talley Ballou, D. D. S., Richmond.

Director tuberculosis out-patient service:

*Agnes D. Randolph, R. N., Richmond.

Epidemiologist:

*H. G. Grant, M. D.

Appropriations for fiscal year ending June

30, 1927:

Administration.....	\$23,880
Sanitary engineering.....	17,750
Publicity.....	5,600
Rural health work.....	50,210
Inspection of convict camps.....	3,000
Laboratory.....	20,195
Child welfare and public health nursing.....	50,000
Bureau of social hygiene.....	10,000
Control of epidemics.....	10,000
Vital statistics.....	24,535
Collection and publication of marriage and divorce statistics.....	3,615
Prevention of blindness.....	2,300
Tuberculosis education.....	63,640
Total.....	293,675

Publications issued by health department:

Monthly bulletin.

Annual report.

WASHINGTON

Board of health:

A. E. Stuht, M. D., director of health, chairman.

Clarence A. Smith, M. D., Seattle, Wash.

James H. Egan, M. D., Tacoma.

Samuel L. Caldbick, M. D., Everett.

John O'Shea, M. D., Spokane.

H. W. Nightingale, secretary, Seattle.

Executive health officer:

*A. E. Stuht, M. D., State director of health, Seattle.

Epidemiologist:

*A. U. Simpson, M. D., Seattle.

Chief of laboratory:

*A. U. Simpson, M. D., Seattle.

Sanitary engineer:

*H. W. Nightingale, C. E., Seattle.

Registrar:

*H. W. Nightingale, C. E., Seattle.

Division of public health nursing:

*Mary Louise Allen, chief.

Appropriation for two years ending March

31, 1931:

Operations.....	\$100,000
Tuberculosis hospitals—	
State aid to local sanatoria.....	125,000
Additional for King County hospital.....	30,000

WEST VIRGINIA

Public health council:

- B. O. Robinson, M. D., president, Parkersburg.
- W. M. Babb, M. D., Keyser.
- H. A. Barbee, M. D., Point Pleasant.
- W. S. Fulton, M. D., Wheeling.
- W. E. Neal, M. D., Huntington.
- J. L. Pyle, M. D., Chester.
- W. T. Henshaw, M. D., commissioner of health, Charleston.

Executive health officer:

- *W. T. Henshaw, M. D., commissioner of health, Charleston.

Division of sanitary engineering:

- *Ellis S. Tisdale, chief engineer, Charleston.
- John B. Harrington, assistant engineer, Charleston.

C. F. Browning, assistant engineer, Charleston.

Division of vital statistics:

- *Carl F. Raver, M. D., M. P. H.

Division of child hygiene:

- *R. H. Paden, M. D., director, Charleston.
- Edna M. Hardsaw, R. N., field advisory nurse, Charleston.
- *Wayne Welton Gadd, R. N., field advisory nurse, Charleston.

Division of preventable diseases:

- *W. T. Henshaw, M. D., acting director, Charleston.

Bureau of venereal diseases:

- *David Littlejohn, A. A. surgeon, U. S. P. H. S., acting director, Charleston.
- *Ada Coddington McDermott, associate director, Charleston.

Division of rural sanitation:

- *David Littlejohn, A. A. surgeon, U. S. P. H. S., director, Charleston.

Hygienic laboratory:

- *Elizabeth I. Parsons, director, Charleston.
- Edith K. Myers, laboratory technician, Charleston.
- J. Roy Monroe, technician, Charleston.

M. C. Harp, technician, Charleston.

Bureau of public health education:

- *Dorothea Campbell, director, Charleston.

Appropriation for fiscal year ending June 30, 1930:

For general use.....	\$126,000
Salary of commissioner.....	4,800
Vaccines.....	10,000
Total.....	140,800

Other sources of revenue:

Expenses of cooperative work with the Federal Government:

Expenses of cooperative rural health work with the Rockefeller foundation.

Publications issued by health department:

Quarterly bulletin.

Annual report.

WISCONSIN

Board of health:

- G. Windesheim, M. D., president, Kenosha.
- Joseph Dean, M. D., vice president, Madison.
- J. S. Seelman, M. D., Milwaukee.
- Mina B. Glasier, M. D., Bloomington.
- Stephen Cahana, M. D., Milwaukee.
- H. H. Ainsworth, M. D., Birchwood.
- C. A. Harper, M. D., State health officer, Madison.

Executive health officer:

- *C. A. Harper, M. D., State health officer, Madison.

Assistant State health officer:

- *G. W. Henika, M. D., assistant State health officer, Madison.

Deputy State health officers:

- *W. J. Miller, M. D., Madison.
- *G. E. Hoyt, M. D., Milwaukee.
- *V. A. Gudex, M. D., Oshkosh.
- *I. D. Wiltrot, M. D., Chippewa Falls.
- *R. L. Frisbie, M. D., Rhinelander.

Bureau of vital statistics:

- *C. A. Harper, M. D., State registrar, Madison.
- *L. W. Hutchcroft, statistician, Madison.

Bureau of communicable diseases:

- *H. M. Guilford, M. D., director, Madison.

Bureau of sanitary engineering:

- *L. F. Warrick, State sanitary engineer, Madison.
- *O. J. Muegge, assistant sanitary engineer, Madison.
- *E. J. Beatty, assistant sanitary engineer, Madison.
- *Harold Ruf, assistant sanitary engineer, Madison.
- *E. J. Tully, chemical engineer, Madison.

Bureau of education:

- *L. W. Bridgman, acting director, Madison.

Bureau of child welfare:

- *Charlotte Calvert, M. D., acting director, Madison.
- *Eleanor Hutchinson, M. D., child health physician, Madison.
- *Margaret Nelson, M. D., child health physician, Madison.
- *Margaret J. Hatfield, M. D., child health physician.
- *Helen Thayer, organizer of infant hygiene courses, Madison.

Bureau of public-health nursing:

- *Cornelia Van Kooy, R. N., director, Madison.
- Edith L. Olson, R. N., field advisory nurse, Madison.

Bureau of nursing education:

- *Adda Eldredge, R. N., director, Madison.

Bureau of plumbing and domestic sanitary engineering:

- *Frank R. King, State domestic sanitary engineer, Madison.

Bureau of social hygiene:

*H. M. Guilford, M. D., director, Madison.
 *Aimee Zillmer, lecturer, Madison.
 *D. M. Warner, lecturer, Madison.

Laboratory service:

*W. D. Stovall, M. D., director, State laboratory, Madison.
 *M. S. Nichols, chemist, State laboratory, Madison.
 *Anna Brandsmark, director, branch laboratory, Rhinelander.
 *Mildred Englebert, director, cooperative laboratory, Beloit.
 *Marjorie Bates, director, cooperative laboratory, Oshkosh.
 *Henry Miller, director, cooperative laboratory, Kenosha.
 *Josephine Foote, director, cooperative laboratory, Wausau.
 *Anna Sokolnikoff, director, cooperative laboratory, Superior.
 *Clarissa McFetridge, director, cooperative laboratory, Green Bay.

Appropriations for fiscal year ending June 30, 1930:

General administration.....	\$34,000
Emergency appropriation for epidemics.....	7,500
Branch laboratory and State cooperative laboratories.....	9,000
Prevention of infantile blindness.....	1,500
Venereal disease control work.....	36,370
Bureau of sanitary engineering.....	14,000
Bureau of communicable diseases.....	13,300
Prevention of stream and lake pollution.....	15,000

Appropriations for fiscal year ending June 30, 1930—Continued.

Bureau of child welfare and public health nursing.....	\$51,000
Public health work and the investigation and prevention of disease among the Indians.....	15,000
Comfort station supervision.....	5,000
Licensing of embalmers, hotels and restaurants, plumbers, beauty parlors, nurses, and barbers	86,642
Total.....	308,312

Publications issued by health department:

Quarterly bulletin.

Biennial report.

WYOMING

Board of health:

Albert B. Tonkin, M. D., president, Riverton.
 William H. Roberts, M. D., vice president, Sheridan.
 W. H. Hassed, M. D., secretary and executive officer, Cheyenne.
 Galen A. Fox, M. D., Cheyenne.
 B. V. McDermott, M. D., Hanna

Executive health officer:

*W. H. Hassed, M. D., State health officer, Cheyenne.

Appropriations for biennial period ending Mar. 31, 1931:

State board of health.....	\$11,000
Salary of secretary.....	8,000
Maternal and infant welfare.....	7,500
Bureau of vital statistics.....	3,500
Total.....	30,000

DEATHS DURING WEEK ENDED NOVEMBER 2, 1929

Summary of information received by telegraph from industrial insurance companies for the week ended November 2, 1929, and corresponding week of 1928. (From the Weekly Health Index, November 6, 1929, issued by the Bureau of the Census, Department of Commerce)

	Week ended Nov. 2, 1929	Corresponding week, 1928
Policies in force.....	75,003,699	72,146,556
Number of death claims.....	13,901	12,116
Death claims per 1,000 policies in force, annual rate.....	9.7	8.8

November 15, 1929

Deaths from all causes in certain large cities of the United States during the week ended November 2, 1929, infant mortality, annual death rate, and comparison with corresponding week of 1928. (From the Weekly Health Index, November 6, 1929, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Nov. 2, 1929		Annual death rate per 1,000, corre- sponding week, 1928	Deaths under 1 year		Infant mortality rate, week ended Nov. 2, 1929 ¹
	Total deaths	Death rate ¹		Week ended Nov. 2, 1929	Corre- sponding week, 1928	
Total (63 cities)	6,994	12.4	11.7	577	678	150
Akron	52			8	5	83
Albany ⁴	34	14.8	16.1	2	4	40
Atlanta	80	16.4	15.2	4	12	42
White	40			2	4	-
Colored	40	(3)	(3)	2	8	58
Baltimore ⁴	201	12.7	11.3	18	14	40
White	150			10	9	40
Colored	51	(3)	(3)	8	5	127
Birmingham	63	14.8	13.6	5	9	45
White	33			2	7	30
Colored	30	(2)	(2)	3	2	69
Boston	232	15.2	12.8	17	24	47
Bridgeport	20			1	3	17
Buffalo	161	15.1	14.4	7	11	30
Cambridge	18	7.5	12.1	1	4	18
Camden	31	12.0	8.5	1	2	17
Canton	18	8.1	8.5	2	5	47
Chicago ⁴	704	11.7	11.2	56	62	50
Cincinnati	137			9	10	53
Cleveland	188	9.7	9.5	21	17	62
Columbus	89	15.6	12.4	7	7	66
Dallas	44	10.6	9.8	2	11	-
White	36			1	8	-
Colored	8	(2)	(2)	1	3	-
Dayton	42	11.9	8.5	2	6	32
Denver	82	14.6	13.5	10	8	97
Des Moines	25	8.6	8.6	2	0	36
Detroit	267	10.1	11.1	36	51	58
Duluth	14	6.3	5.8	0	0	0
El Paso	20	8.9	16.4	3	8	-
Erie	15			1	4	20
Fall River ⁴	24	9.3	9.7	3	2	56
Flint	36	12.6	12.3	5	7	61
Fort Worth	27		7.4	1	2	-
White	21			0	2	-
Colored	6	(2)	(2)	1	0	-
Grand Rapids	33	10.5	10.8	2	3	30
Houston	67			5	2	-
White	46			5	1	-
Colored	21	(2)	(2)	0	1	-
Indianapolis	107	14.6	11.9	13	6	104
White	92			11	6	102
Colored	15	(2)	(2)	2	0	119
Jersey City	64	10.3	9.8	5	6	33
Kansas City, Kans	21	9.3	10.2	1	1	22
White	15			1	1	25
Colored	6	(2)	(2)	0	0	0
Kansas City, Mo	101	13.5	12.2	9	6	76
Knoxville	27	13.4	12.9	1	3	22
White	23			1	3	24
Colored	4	(2)	(2)	0	0	0
Los Angeles	220			16	13	47
Louisville	176	27.9	13.8	8	13	65
White	130			6	9	56
Colored	46	(2)	(2)	2	4	126
Lowell	21			3	5	68
Lynn	17	8.4	9.9	3	3	82
Memphis	69	19.0	15.4	8	3	94
White	34			1	2	19
Colored	35	(2)	(2)	7	1	219
Milwaukee	126	12.1	10.2	19	16	83
Minneapolis	87	10.0	9.5	6	5	37
Nashville	35	13.1	18.7	2	10	32
White	23			1	5	22
Colored	12	(2)	(2)	1	5	63

Footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended November 2, 1929, infant mortality, annual death rate, and comparison with corresponding week of 1928—Continued

City	Week ended Nov. 2, 1929		Annual death rate per 1,000, corresponding week, 1928	Deaths under 1 year		Infant mortality rate, week ended Nov. 2, 1929 ¹
	Total deaths	Death rate ²		Week ended Nov. 2, 1929	Corresponding week, 1928	
New Bedford	30			0	1	0
New Haven	40	11.1	12.0	1	2	15
New Orleans	155	18.9	19.1	8	31	40
White	81			5	15	35
Colored	74	(*)	(*)	3	16	50
New York	1,404	12.2	11.3	109	125	45
Bronx Borough	202	11.1	9.0	16	12	47
Brooklyn Borough	475	10.8	10.0	44	53	45
Manhattan Borough	530	15.8	15.9	34	48	42
Queens Borough	152	9.3	7.8	13	12	53
Richmond Borough	45	15.6	12.8	2	0	36
Newark, N. J.	108	11.9	8.9	10	8	53
Oakland	48	9.2	9.5	3	4	33
Oklahoma City	31			2	3	40
Omaha	37	8.7	12.7	2	7	23
Paterson	41	14.8	9.0	3	0	53
Philadelphia	435	11.0	10.5	34	36	48
Pittsburgh	185	14.4	13.0	28	16	96
Portland, Oreg.	72			3	2	34
Providence	73	13.3	10.4	6	4	33
Richmond	57	15.3	15.1	2	6	28
White	34			1	2	21
Colored	23	(*)	(*)	1	4	41
Rochester	73	11.6	9.4	6	5	51
St. Louis	220	13.6	13.0	15	16	51
St. Paul	39			1	1	10
Salt Lake City	33	12.5	12.5	4	1	62
San Antonio	75	18.0	14.1	7	8	
San Diego	36			0	1	0
San Francisco	162	14.5	14.7	10	9	64
Seattle	90	12.3	10.8	6	6	64
Somerville	14	7.1	4.6	0	0	0
Spokane	21	10.1	14.4	2	0	52
Springfield, Mass.	22	7.7	15.0	1	5	17
Syracuse	38	10.0	13.9	2	4	24
Tacoma	18	8.5	7.1	2	2	51
Toledo	82	13.7	13.4	8	14	75
Trenton	33	12.4	10.5	4	0	72
Utica	21	10.5	14.0	3	2	76
Washington, D. C.	147	13.9	13.5	7	14	41
White	101			3	5	25
Colored	46	(*)	(*)	4	9	76
Waterbury	18			2	4	51
Wilmington, Del.	23	9.4	15.5	1	3	26
Worcester	51	13.5	14.6	7	7	88
Yonkers	25	10.8	7.8	4	2	93

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

³ Data for 71 cities.

⁴ Deaths for week ended Friday.

⁵ In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 28; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 23.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended November 2, 1929, and November 3, 1928

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 2, 1929, and November 3, 1928

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928
New England States:								
Maine	8	5		1	29	137	0	0
New Hampshire	2			21	6	37	0	0
Vermont	3	4				2	0	0
Massachusetts	95	94	3	5	51	307	1	1
Rhode Island	14	19	29	5		11	0	0
Connecticut	19	26	5	3	2	42	1	0
Middle Atlantic States:								
New York	114	164	16	15	183	330	11	20
New Jersey	126	98	6	3	28	68	6	3
Pennsylvania	232	198			262	451	5	0
East North Central States:								
Ohio	106	155	16	12	198		6	4
Indiana	32	62		7	6	6	1	0
Illinois	226	270	17	17	103	141	12	4
Michigan	96	99	4	10	103	60	10	5
Wisconsin	19	25	20	22	163	81	0	7
West North Central States:								
Minnesota	25	44	2	1	33	28	1	1
Iowa	15	22			22		0	1
Missouri	41	43	2	9	16	8	5	3
North Dakota	11	4		2	9		0	0
South Dakota					5	1	0	0
Nebraska	32	18	4	2	7	11	0	1
Kansas	55	25	1	5	50	5	0	0
South Atlantic States:								
Delaware	1		3		1		0	0
Maryland	19	34	13	8	12	17	0	0
District of Columbia	12	75		1	2	2	0	0
Virginia								
West Virginia	34	39	12	8	28	35	0	0
North Carolina	268	220	4		1	51	1	0
South Carolina	68	80	506	858			0	0
Georgia	21	50	85	163	2	26	2	0
Florida	16	12	2		1	6	0	0
East South Central States:								
Kentucky	31	13					4	1
Tennessee	81	48	40	41	39		4	0
Alabama	72	156	85	62	7	6	0	1
Mississippi	68	32					0	0

¹ New York City only.

² Week ended Friday.

*Cases of certain communicable diseases reported by telegraph by State health officers
for weeks ended November 2, 1929, and November 3, 1928—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningoceleus meningitis	
	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928
West South Central States:								
Arkansas	20	21	27	56	1	1	0	0
Louisiana	47	33	4	10	8	0	1	1
Oklahoma ¹	108	158	47	37	17	2	0	0
Texas	111	57	19	34	5	2	0	0
Mountain States:								
Montana	2	4	1	—	147	10	3	3
Idaho	1	3	—	1	9	1	3	1
Wyoming	—	11	—	—	1	1	3	0
Colorado	11	22	—	4	4	5	0	4
New Mexico	13	13	—	1	2	9	0	0
Arizona	32	7	6	1	3	—	9	0
Utah ¹	—	7	—	4	25	2	4	2
Pacific States:								
Washington	26	6	—	—	28	33	2	2
Oregon	8	16	17	19	10	20	2	2
California	55	103	24	2,389	59	15	3	3
Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928
New England States:								
Maine	1	2	31	31	0	0	3	3
New Hampshire	0	0	11	13	0	0	0	0
Vermont	0	1	6	2	5	0	0	0
Massachusetts	4	6	156	139	0	0	7	5
Rhode Island	0	—	12	12	0	0	0	0
Connecticut	0	0	36	25	0	0	0	0
Middle Atlantic States:								
New York	14	17	192	182	20	2	33	54
New Jersey	2	0	86	66	0	0	9	8
Pennsylvania	12	9	250	230	7	0	42	78
East North Central States:								
Ohio	9	5	225	214	86	4	34	22
Indiana	0	4	115	76	101	8	6	3
Illinois	3	2	333	269	104	15	20	26
Michigan	2	3	199	144	81	15	11	5
Wisconsin	0	1	88	111	18	14	15	3
West North Central States:								
Minnesota	1	2	103	79	2	3	7	10
Iowa	6	1	49	64	40	22	2	1
Missouri	2	1	53	63	3	3	7	19
North Dakota	0	1	24	39	8	0	1	3
South Dakota	0	0	13	24	8	3	11	0
Nebraska	1	1	31	50	9	1	1	0
Kansas	3	1	86	81	11	7	5	3
South Atlantic States:								
Delaware	0	0	4	2	0	0	1	1
Maryland ¹	0	1	53	35	0	0	18	21
District of Columbia	0	2	5	12	0	0	0	2
Virginia	5	—	—	—	45	—	—	—
West Virginia	0	2	75	59	9	6	22	15
North Carolina	3	0	142	125	8	7	15	17
South Carolina	2	1	41	40	0	0	20	32
Georgia	0	2	40	38	0	0	4	14
Florida	0	0	14	4	0	0	2	3
East South Central States:								
Kentucky	0	2	71	56	—	2	8	5
Tennessee	1	0	79	39	0	1	27	25
Alabama	0	2	77	49	1	2	12	15
Mississippi	0	0	22	24	0	0	10	10

¹ Week ended Friday.¹ Figures for 1929 are exclusive of Oklahoma City and Tulsa.

Act

November 15, 1929

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended November 2, 1929, and November 3, 1928—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928	Week ended Nov. 2, 1929	Week ended Nov. 3, 1928
West South Central States:								
Arkansas.....	0	0	26	28	2	0	22	10
Louisiana.....	0	0	24	21	0	0	13	12
Oklahoma ²	0	1	42	44	32	12	41	71
Texas.....	0	0	28	36	3	3	14	9
Mountain States:								
Montana.....	0	0	30	17	3	22	9	3
Idaho.....	0	2	13	21	6	2	0	1
Wyoming.....	0	0	4	23	10	7	0	1
Colorado.....	0	2	16	19	3	6	1	7
New Mexico.....	1	0	3	9	2	0	4	12
Arizona.....	1	0	17	4	7	1	13	5
Utah ²	0	0	4	10	0	1	3	0
Pacific States:								
Washington.....	3	6	46	27	15	61	12	6
Oregon.....	2	4	27	19	3	40	4	4
California.....	1	4	200	179	17	6	13	11

² Week ended Friday.² Figures for 1929 are exclusive of Oklahoma City and Tulsa.**SUMMARY OF MONTHLY REPORTS FROM STATES**

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Menin-gococcus menin-gitis	Diph-theria	Influ-enza	Malaria	Measles	Pella-gra	Polio-mye-litis	Scarlet fever	Small-pox	Ty-phoid fever
<i>August, 1929</i>										
Massachusetts.....	13	179	5	4	139	-----	11	100	0	43
<i>September, 1929</i>										
California.....	22	133	51	11	112	7	24	301	88	46
Massachusetts.....	9	223	4	2	106	1	21	278	0	39
Nevada.....	1	2	-----	-----	-----	-----	-----	1	0	1
Virginia.....	5	330	460	111	72	30	81	181	2	124
<i>October, 1929</i>										
Connecticut.....	2	99	45	2	11	-----	4	118	0	10
North Dakota.....	9	29	2	-----	27	-----	2	62	30	11
Wyoming.....	3	3	1	-----	1	-----	0	13	4	6

<i>August, 1929</i>		Cases	Anthrax:		Cases
Massachusetts:			California.....	-----	3
Actinomycosis.....		2	Massachusetts.....	-----	1
Chicken pox.....	132		Chicken pox:		
German measles.....	13		California.....	-----	268
Lethargic encephalitis.....	3		Massachusetts.....	-----	127
Mumps.....	103		Virginia.....	-----	81
Ophthalmia neonatorum.....	129		Dysentery:		
Septic sore throat.....	12		California (amebic).....	-----	2
Tetanus.....	2		California (bacillary).....	-----	6
Trachoma.....	10		Massachusetts.....	-----	2
Whooping cough.....	528		Dysentery and diarrhea:		
			Virginia.....	-----	435
<i>September, 1929</i>		1	Food poisoning:		
Actinomycosis:			California.....	-----	4
California.....					

	Cases	October, 1929									Cases
German measles:											
California.....	24	Chicken pox:									
Massachusetts.....	18	Connecticut.....									241
Granuloma (coccidioidal):		North Dakota.....									90
California.....	2	Wyoming.....									13
Leprosy:											
California.....	2	German measles:									
Lethargic encephalitis:		Connecticut.....									7
California.....	5	Impetigo contagiosa:									
Massachusetts.....	4	Wyoming.....									1
Mumps:											
California.....	580	Lethargic encephalitis:									
Massachusetts.....	67	Connecticut.....									4
Ophthalmia neonatorum:		Mumps:									
California.....	1	Connecticut.....									67
Massachusetts.....	103	North Dakota.....									19
Paratyphoid fever:		Wyoming.....									2
California.....	1										
Rabies in animals:		Paratyphoid fever:									
California.....	61	Connecticut.....									10
Septic sore throat:		Scabies:									
Massachusetts.....	10	North Dakota.....									1
Tetanus:		Septic sore throat:									
California.....	6	Connecticut.....									7
Massachusetts.....	4	Trachoma:									
Trachoma:		North Dakota.....									15
California.....	6	Trichinosis:									
Massachusetts.....	2	Connecticut.....									1
Tularaemia:		Undulant fever:									
Virginia.....	1	Connecticut.....									1
Undulant fever:		North Dakota.....									2
California.....	5	Vincent's angina:									
Virginia.....	2	North Dakota.....									37
Whooping cough:		Whooping cough:									
California.....	429	Connecticut.....									140
Massachusetts.....	415	North Dakota.....									16
Nevada.....	1	Wyoming.....									6
Virginia.....	537										

Number of Cases of Certain Communicable Diseases Reported for the Month of August, 1929, by State Health Officers

State	Chick-en pox	Diph-theria	Meas-les	Mumps	Scarlet fever	Small-pox	Tuber-culosis	Ty-phoid fever	Whoop-ing cough
Maine.....	9	6	46	28	42	0	44	12	33
New Hampshire.....		7			10	0			3
Vermont.....	24	5	49	14	13	17	19	10	53
Massachusetts.....	132	179	139	103	199	0	510	43	528
Rhode Island.....	8	17	7	1	16	0	42	7	16
Connecticut.....	92	52	67	15	47	0	126	23	107
New York.....	232	453	385	282	231	16	1,449	242	1,225
New Jersey.....	70	238	73		99	0	435	55	639
Pennsylvania.....	186	292	298	108	306	6	613	163	1,675
Ohio.....	117	146	151	59	192	106	641	163	1,071
Indiana.....	19	63	91	10	190	114	294	43	179
Illinois.....	119	391	342	94	346	58	908	131	1,244
Michigan.....	127	230	225	94	318	114	807	37	785
Wisconsin.....	124	96	288	75	127	36	232	34	1,212
Minnesota.....	35	48	40		124	10	283	20	210
Iowa.....		17			53	23		67	
Missouri.....	18	68	44	22	91	20	257	84	304
North Dakota.....	25	27	90	10	40	13	24	3	32
South Dakota.....	7	6	10	3	27	28	6	23	19
Nebraska.....	14	12	128	15	36	26	28	9	125
Kansas.....	16	47	81	49	65	29	119	61	144

Ma
Ne
Ne
Ne
Pe
Pe
Pe
Oh
Ind
Ind
Mid
Wis
Min
Iow
Mis
Nor
South
Nebr
Kan
Del
Mar
Dist
Virg
West
Nor
South
Geor
Flori
1 Pe

November 15, 1929

Number of Cases of Certain Communicable Diseases Reported for the Month of August, 1929, by State Health Officers—Continued

State	Chick-en pox	Diph-theria	Meas-les	Mumps	Scarlet fever	Small-pox	Tuber-culosis	Ty-phoid fever	Whoop-ing cough
Delaware	2	4	4		2	0	18	17	6
Maryland	24	54	16	38	85	0	307	101	249
District of Columbia	9	37	5		15	0	82	10	41
Virginia	64	189	71		113	6	126	175	665
West Virginia	21	53	66		91	5	52	131	203
North Carolina	28	343	4		199	14		186	974
South Carolina	38	232	18	55	53	3	173	259	663
Georgia	8	88	31	21	68	0	107	226	131
Florida	1	59	4	13	11	0	39	17	34
Kentucky ²									
Tennessee	5	97	19	15	70	7	307	464	125
Alabama	14	149	47	6	102	1	313	156	102
Mississippi	226	154	66	102	61	1	277	244	822
Arkansas	22	15	3	31	27	13	19	99	88
Louisiana									
Oklahoma ¹	5	69	39	17	69	16	73	302	51
Texas ²									
Montana	10	7	85	25	31	11	8	30	25
Idaho	11	8	21	5	17	40	8	7	21
Wyoming	5	3	5	3	5	3	11	5	4
Colorado	40	25	32	39	18	20	72	50	93
New Mexico ²									
Arizona	3	1	3	1	4	2	65	3	4
Utah ²									
Nevada						16			
Washington	62	25	76	116	37	71	158	32	179
Oregon	20	23	46	31	20	40	65	23	40
California	148	142	101	412	265	83	723	57	557

¹ Pulmonary.² Reports received weekly.³ Exclusive of Oklahoma City and Tulsa.

Case Rates per 1,000 Population (Annual Basis) for the Month of August, 1929

State	Chick-en pox	Diph-theria	Meas-les	Mumps	Scarlet fever	Small-pox	Tuber-culosis	Ty-phoid fever	Whoop-ing cough
Maine	0.13	0.09	0.68	0.41	0.62	0.00	0.65	0.18	0.49
New Hampshire		.18			.26	.00		.08	
Vermont	.80	.17	1.64	.47	.43	.57	.63	.33	1.77
Massachusetts	.36	.49	.38	.28	.54	.00	1.38	.12	1.43
Rhode Island	.13	.27	.11	.02	.26	.00	.68	.11	.26
Connecticut	.64	.36	.46	.10	.33	.00	.87	.16	.74
New York	.23	.46	.39	.28	.23	.02	1.46	.24	1.23
New Jersey	.21	.72	.22		.30	.00	1.32	.17	1.93
Pennsylvania	.22	.34	.35	.13	.36	.01	.72	.19	1.98
Ohio	.20	.25	.26	.10	.33	.18	1.09	.28	1.82
Indiana	.07	.23	.33	.04	.70	.42	1.08	.16	.66
Illinois	.19	.61	.54	.15	.54	.09	1.43	.21	1.95
Michigan	.32	.58	.56	.24	.80	.29	2.02	.09	1.97
Wisconsin	.49	.38	1.13	.30	.50	.14	.91	.13	4.77
Minnesota	.15	.20	.17		.53	.04	1.21	.09	.90
Iowa	.08				.26	.12		.32	
Missouri	.06	.23	.15	.07	.30	.07	.86	.28	1.01
North Dakota	.46	.50	1.65	.18	.73	.24	.44	.06	.59
South Dakota	.12	.10	.17	.05	.45	.46	.10	.38	.31
Nebraska	.12	.10	1.06	.12	.30	.22	.23	.07	1.04
Kansas	.10	.30	.52	.31	.42	.19	.76	.39	.92
Delaware	.10	.19	.19		.10	.00	1.38	.82	.29
Maryland	.17	.39	.12	.42	.61	.00	2.21	.73	1.79
District of Columbia	.19	.77	.10		.31	.00	1.71	.21	.86
Virginia	.29	.85	.32		.51	.03	1.57	.79	3.01
West Virginia	.14	.36	.44		.61	.03	.35	.88	1.36
North Carolina	.11	1.36	.02		.79	.06		.74	3.85
South Carolina	.24	1.45	.11	.34	.33	.02	1.08	1.62	4.33
Georgia	.03	.32	.11	.08	.25	.00	.39	.82	.48
Florida	.01	.48	.03	.10	.09	.00	.31	.14	.27

¹ Pulmonary.

**Case Rates per 1,000 Population (Annual Basis) for the Month of August, 1929—
Continued**

State	Chick-en pox	Diph-theria	Meas-les	Mumps	Scarlet fever	Small-pox	Tuber-culosis	Ty-phoid fever	Whoop-ing cough
Kentucky ¹									
Tennessee	.02	.45	.09	.07	.33	.03	1.43	2.17	.58
Alabama	.06	.68	.21	.03	.46	.00	1.42	.71	.46
Mississippi	1.49	1.01	.43	.67	.45	.01	1.82	1.60	5.40
Arkansas	.13	.09	.02	.19	.16	.08	1.11	.59	.53
Louisiana		.50	.04	.01	.14	.00	1.70	.61	.25
Oklahoma ²	.03	.37	.21	.09	.37	.09	.40	1.64	.28
Texas ²									
Montana	.21	.15	1.82	.54	.66	.24	.17	.64	.54
Idaho	.23	.17	.44	.11	.36	.84	1.17	.15	.44
Wyoming	.23	.14	.23	.14	.23	.14	1.05	.23	.19
Colorado	.43	.27	.34	.42	.19	.21	.77	.63	.99
New Mexico ²									
Arizona	.07	.02	.07	.02	.10	.05	1.57	.07	.10
Utah ²									
Nevada						2.43			
Washington	.45	.18	.56	.85	.27	.52	1.15	.23	1.31
Oregon	.26	.30	.59	.40	.28	.52	.84	.30	.52
California	.37	.36	.25	1.04	.67	.21	1.82	.22	1.40

¹ Pulmonary.² Reports received weekly.³ Exclusive of Oklahoma City and Tulsa.

ADMISSIONS TO HOSPITALS FOR THE INSANE, MARCH, 1929

Reports for the month of March, 1929, showing new admissions to hospitals for the care and treatment of the insane, have been received by the Public Health Service from 100 institutions located in 35 States, the District of Columbia, and the Territory of Hawaii. These hospitals reported a total of 151,301 patients (80,071 male and 71,230 female) on March 31, 1929, including those on parole.

The following table shows the number of new admissions for the month of March, 1929, by psychoses:

Psychoses	Number of first admissions		
	Male	Female	Total
1. Traumatic psychoses	12	6	18
2. Senile psychoses	153	98	251
3. Psychoses with cerebral arteriosclerosis	171	77	248
4. General paralysis	201	44	245
5. Psychoses with cerebral syphilis	24	18	42
6. Psychoses with Huntington's chorea	2	2	4
7. Psychoses with brain tumor	1	0	1
8. Psychoses with other brain or nervous disease	35	11	46
9. Alcoholic psychoses	89	14	103
10. Psychoses due to drugs and other exogenous toxins	24	6	30
11. Psychoses with pellagra	7	15	22
12. Psychoses with other somatic diseases	44	42	86
13. Manic-depressive psychoses	165	214	379
14. Involution melancholia	15	41	56
15. Dementia praecox (schizophrenia)	313	275	588
16. Paranoia and paranoid conditions	28	40	68
17. Epileptic psychoses	37	27	64
18. Psychoneuroses and neuroses	19	36	55
19. Psychopathic personality	23	6	29
20. Psychoses with mental deficiency	51	45	96
21. Undiagnosed psychoses	85	86	171
22. Without psychosis	146	47	193
Total	1,645	1,150	2,795

November 15, 1929

Fifty-eight and nine-tenths per cent of the new admissions were males and 41.1 per cent were females, giving a ratio of 143 males per 100 females.

At the end of the month 14,128 patients were on parole, 7,754 male and 6,374 female. The number on parole was 9.7 per cent of the male patients, 8.9 per cent of the female patients, and 9.3 per cent of the total.

Cases of dementia praecox constituted 21 per cent of the first admissions; manic-depressive psychoses, 13.6 per cent; senile psychoses, 9 per cent; psychoses with cerebral arteriosclerosis, 8.9 per cent; general paralysis, 8.8 per cent; without psychosis, 6.9 per cent; and undiagnosed psychoses, 6.1 per cent.

PATIENTS IN INSTITUTIONS FOR THE FEEBLE-MINDED, JANUARY TO MARCH, 1929

Reports for the first quarter of the year 1929 have been received by the Public Health Service from 27 institutions for the care of the feeble-minded located in 22 States, including one institution for females only with more than 1,200 patients. The total number of patients in these institutions on March 31, 1929, including those on temporary leave or otherwise absent but still on the books, was 33,857.

The first admissions were as follows:

	Male	Female	Total
January.....	159	131	290
February.....	176	130	306
March.....	207	161	368
Total.....	542	422	964

Of the first admissions during the three months, 56.2 per cent were males and 43.8 per cent were females, the ratio being 128 males per 100 females.

On March 31, 1929, there were 17,329 male patients and 16,528 female patients on the books. During the three months 258 patients were discharged—145 male patients and 113 female patients. One hundred and seventy male patients and 108 female patients died.

The annual death rates based on the estimated number of patients on the books of the institutions the middle of February were: Males, 40.2 per 1,000; females, 26.6 per 1,000; persons, 33.5 per 1,000.

The following table shows the numbers of patients in the institutions and on temporary leave on January 1, and at the end of each month

of the first quarter of 1929, and the percentage of the total patients who were on leave:

	Jan. 1, 1929	Jan. 31, 1929	Feb. 28, 1929	Mar. 31, 1929
Patients in institutions:				
Male.....	14,609	14,910	15,039	15,052
Female.....	14,453	14,656	14,812	14,774
Total.....	29,062	29,566	29,851	29,826
Patients on temporary leave:				
Male.....	2,471	2,202	2,183	2,277
Female.....	1,883	1,746	1,713	1,754
Total.....	4,354	3,948	3,896	4,031
Total patients on books:				
Male.....	17,080	17,112	17,222	17,329
Female.....	16,336	16,402	16,525	16,528
Total.....	33,416	33,514	33,747	33,857
Per cent of total patients on temporary leave:				
Male.....	14.5	12.9	12.7	13.1
Female.....	11.5	10.6	10.4	10.6
Total.....	13.0	11.8	11.5	11.9

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 95 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,395,000. The estimated population of the 88 cities reporting deaths is more than 29,820,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended October 26, 1929, and October 27, 1928

	1929	1928	Estimated expectancy
<i>Cases reported</i>			
Diphtheria:			
46 States.....	2,420	2,490	
95 cities.....	810	780	1,091
Measles:			
45 States.....	1,507	1,573	
95 cities.....	181	314	
Meningococcus meningitis:			
45 States.....	102	94	
95 cities.....	35	46	
Poliomyelitis:			
46 States.....	104	137	
Scarlet fever:			
46 States.....	2,873	2,397	
95 cities.....	834	675	792
Smallpox:			
46 States.....	432	231	21
95 cities.....	62	13	
Typhoid fever:			
46 States.....	496	644	
95 cities.....	92	111	101
<i>Deaths reported</i>			
Influenza and pneumonia:			
88 cities.....	674	560	
Smallpox:			
88 cities.....	0	0	

November 15, 1929

City reports for week ended October 26, 1929

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during non-epidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1920 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population, July 1, 1928, estimated	Chick-en pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland	78,600	3	2	0		0	0	0	2
New Hampshire:									
Concord	(1)	0	1	1		0	0	0	3
Manchester	85,700	0	2	0		0	0	0	1
Vermont:									
Barre	(1)		0						
Massachusetts:									
Boston	799,200	39	39	23		0	3	21	9
Fall River	134,300	3	4	4	1	0	0	2	1
Springfield	149,800	26	4	9		0	0	1	0
Worcester	197,600	14	6	0		0	10	0	1
Rhode Island:									
Pawtucket	73,100	1	1	1		0	0	0	1
Providence	286,300	3	8	8		0	0	0	5
Connecticut:									
Bridgeport	(1)	0	7	1		0	0	0	1
Hartford	172,300	0	6	1		0	0	3	2
New Haven	187,900	19	1	1	1	0	0	0	3
MIDDLE ATLANTIC									
New York:									
Buffalo	555,800	27	14	16		0	2	3	12
New York	6,017,500	0	142	74	17	15	11	17	181
Rochester	328,200	4	7	1	1	1	0	0	3
Syracuse	199,300	7	8	0		0	0	5	6
New Jersey:									
Camden	135,400	4	8	8		0	0	0	2
Newark	473,600	18	13	34		0	4	6	12
Trenton	139,000	0	3	1		0	0	0	4
Pennsylvania:									
Philadelphia	2,064,200	38	60	22	6	5	5	32	46
Pittsburgh	673,800	28	30	21	3	3	21	0	32
Reading	115,400	7	2	1		0	0	0	0
EAST NORTH CENTRAL									
Ohio:									
Cincinnati	413,700	11	13	12		2	0	0	14
Cleveland	1,010,300	64	53	17	4	1	2	5	23
Columbus	269,000	38	10	4	3	2	1	0	5
Toledo	313,200	54	14	2	2	2	51	0	1
Indiana:									
Fort Wayne	105,300	0	4	3		1	1	0	4
Indianapolis	382,100	15	15	4		0	2	2	10
South Bend	86,100	0	3	0		0	0	0	3
Terre Haute	73,500	14	3	1		0	0	0	0
Illinois:									
Chicago	3,157,400	114	91	144	5	3	6	13	50
Springfield	67,200	9	2	0		0	0	0	0
Michigan:									
Detroit	1,378,900	51	65	63	4	6	19	20	25
Flint	148,800	5	8	1		0	0	1	1
Grand Rapids	164,200	0	4	0		1	2	3	1

¹ No estimate of population made.

City reports for week ended October 26, 1929—Continued

Division, State, and city	Population, July 1, 1928, estimated	Chick-en pox, cases re-por-ted	Diphtheria		Influenza		Meas-les, cases re-por-ted	Mumps, cases re-por-ted	Pneu-monia, deaths re-por-ted
			Cases, es-ti-mated ex-pectancy	Cases re-por-ted	Cases re-por-ted	Deaths re-por-ted			
EAST NORTH CENTRAL—continued									
Wisconsin:									
Kenosha	56,500	2							
Milwaukee	544,200	43	23	4		0	1	4	6
Racine	74,400	6	3	2		0	0	0	1
Superior	(1)	0	0	1	1	0	39	0	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth	116,800	11	2	0		0	0	0	3
Minneapolis	455,900	45	33	7		1	6	8	58
St. Paul	(1)	12	14	3		0	0	8	6
Iowa:									
Des Moines	151,903	0	4	1				0	0
Sioux City	80,000	9	2	0				0	3
Waterloo	37,100	5	1	0				1	0
Missouri:									
Kansas City	391,000	19	11	8	1	0	1	2	5
St. Joseph	78,500	2	2	2		0	0	0	2
St. Louis	948,100	11	46	33			2	4	
North Dakota:									
Fargo	(1)	5	0	0		0	1	2	0
Grand Forks	(1)	16	0	0			0	0	
South Dakota:									
Aberdeen	(1)	8	0	0			0	0	
Sioux Falls	(1)	0	1	0			0	0	
Nebraska:									
Omaha	222,800	23	13	15		0	0	0	3
Kansas:									
Topeka	62,800	3	3	1		0	0	11	1
Wichita	99,300	4							
SOUTH ATLANTIC									
Delaware:									
Wilmington	128,500	0	3	0		0	0	0	5
Maryland:									
Baltimore	830,400	21	27	9	5	0	2	7	21
Cumberland	(1)	0	1	0		0	0	0	0
Frederick	(1)	0	0	0		0	0	0	
District of Columbia:									
Washington	852,000	7	21	5	2	1	1	0	11
Virginia:									
Lynchburg	38,600	7	4	1		0	0	1	1
Norfolk	184,200	1	3	4		0	0	0	4
Richmond	194,400	1	26	16	4	1	0	1	2
Roanoke	64,600	0	9	2		0	0	0	1
West Virginia:									
Charleston	55,200	10	3	1		0	1	0	1
Wheeling	(1)	0	2	1		0	0	1	3
North Carolina:									
Raleigh	(1)	1	4	3		0	0	0	3
Wilmington	39,100	0	1	0		0	0	0	0
Winston-Salem	80,000	2	6	7		0	0	0	1
South Carolina:									
Charleston	75,900	0	1	0	32	0	0	0	1
Columbia	80,600	0	2	2		0	0	0	4
Georgia:									
Atlanta	255,100	2	11	21	15	0	1	1	2
Brunswick	(1)	0	1	0		0	0	0	1
Savannah	99,900	0	3	0		0	0	0	1
Florida:									
Miami	156,700	0	1	5		0	0	2	1
St. Petersburg	53,300	0	0	2		0	0	0	1
Tampa	113,400	2		6		0	0	1	1

^a No estimate of population made.

November 15, 1929

City reports for week ended October 26, 1929—Continued

Division, State, and city	Population, July 1, 1928, estimated	Chick-en pox, cases reported	Diphtheria		Influenza		Meas-les, cases re-por-ted	Mumps, cases re-por-ted	Pneu-monia, deaths re-por-ted
			Cases, es-timated ex-pectancy	Cases re-por-ted	Cases re-por-ted	Deaths re-por-ted			
EAST SOUTH CENTRAL									
Kentucky:									
Covington.....	59,000	1	2	4	-----	0	0	0	5
Tennessee:									
Memphis.....	190,200	0	10	13	-----	1	0	0	3
Nashville.....	139,600	0	5	0	3	1	0	0	4
Alabama:									
Birmingham.....	222,400	0	8	7	6	0	3	1	5
Mobile.....	69,600	0	2	1	-----	1	0	0	1
Montgomery.....	63,100	1	4	2	-----	0	0	0	-----
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith.....	(1)	0	1	2	-----	0	0	0	-----
Little Rock.....	79,200	2	1	1	-----	0	0	0	1
Louisiana:									
New Orleans.....	429,400	0	11	21	2	3	0	0	11
Shreveport.....	81,300	1	3	0	-----	0	0	1	2
Oklahoma:									
Tulsa.....	170,500	6	5	5	-----	2	0	0	-----
Texas:									
Dallas.....	217,800	3	17	41	-----	0	3	0	1
Fort Worth.....	170,600	0	6	8	-----	0	0	0	4
Galveston.....	50,600	0	1	3	-----	0	0	0	0
Houston.....	(1)	0	6	25	-----	0	1	0	2
San Antonio.....	218,100	0	3	11	-----	2	0	0	5
MOUNTAIN									
Montana:									
Billings.....	(1)	1	0	0	-----	0	0	6	0
Great Falls.....	(1)	11	1	0	-----	0	2	7	1
Helena.....	(1)	0	0	0	-----	0	0	5	0
Missoula.....	(1)	3	1	0	-----	0	0	0	0
Idaho:									
Boise.....	(1)	5	0	0	-----	0	0	0	1
Colorado:									
Denver.....	294,200	20	16	2	-----	0	0	3	10
Pueblo.....	44,200	0	4	0	-----	0	0	0	1
New Mexico:									
Albuquerque.....	(1)	0	0	0	-----	0	0	0	2
Utah:									
Salt Lake City.....	138,000	20	4	1	-----	1	1	4	1
Nevada:									
Reno.....	(1)	0	0	0	1	1	0	0	0
PACIFIC									
Washington:									
Seattle.....	383,200	27	6	2	-----	1	21	-----	-----
Spokane.....	109,100	13	4	0	-----	1	0	0	-----
Tacoma.....	110,500	13	3	17	-----	0	0	0	3
Oregon:									
Portland.....	(1)	19	12	3	-----	0	1	3	3
Salem.....	(1)	1	0	0	-----	0	0	1	0
California:									
Los Angeles.....	(1)	11	44	22	18	1	1	8	5
Sacramento.....	75,700	3	2	0	-----	0	0	27	3
San Francisco.....	585,300	51	17	9	2	0	23	22	3

¹ No estimate of population made.

City reports for week ended October 26, 1929—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases esti- mated expect- ancy	Cases re- ported	Cases esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland	1	5	0	0	0	0	0	0	0	0	13
New Hampshire:											
Concord	1	0	0	0	0	0	0	0	0	0	10
Manchester	1	0	0	0	0	0	0	0	0	0	12
Vermont:											
Barre	0		0			0					
Massachusetts:											
Boston	36	42	0	0	0	10	3	4	0	23	191
Fall River	2	0	0	0	0	2	0	0	0	0	19
Springfield	6	1	0	0	0	2	0	0	0	0	36
Worcester	9	4	0	0	0	0	0	0	0	12	37
Rhode Island:											
Pawtucket	0	2	0	0	0	0	0	0	0	0	17
Providence	5	10	0	0	0	3	1	1	0	3	64
Connecticut:											
Bridgeport	6	3	0	0	0	0	0	1	0	0	27
Hartford	4	3	0	0	0	0	0	1	0	0	18
New Haven	4	2	0	0	0	1	1	0	1	8	54
MIDDLE ATLANTIC											
New York:											
Buffalo	15	20	0	0	0	8	1	0	0	7	138
New York	74	57	0	0	0	100	21	10	5	44	1,497
Rochester	5	2	0	0	0	1	1	0	0	1	72
Syracuse	6	3	0	0	0	0	1	0	0	21	50
New Jersey:											
Camden	3	2	0	0	0	3	1	0	0	0	36
Newark	9	6	0	0	0	6	1	2	0	28	103
Trenton	1	2	0	0	0	3	0	1	1	1	39
Pennsylvania:											
Philadelphia	47	43	0	0	0	28	8	3	0	22	464
Pittsburgh	34	18	0	0	0	7	1	1	0	5	168
Reading	1	2	0	0	0	1	0	0	0	15	25
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	11	15	1	1	0	8	0	1	0	2	140
Cleveland	22	26	0	0	0	10	2	0	0	23	179
Columbus	9	6	1	0	0	6	0	2	1	6	60
Toledo	9	11	1	0	0	5	2	1	0	1	90
Indiana:											
Fort Wayne	1	0	0	10	0	0	1	0	0	0	26
Indianapolis	11	5	2	1	0	3	1	0	0	2	89
South Bend	3	2	0	0	0	2	0	0	0	0	16
Terre Haute	3	2	0	0	0	2	1	0	0	0	20
Illinois:											
Chicago	74	145	1	0	0	35	6	3	2	78	657
Springfield	3	3	0	1	0	1	0	1	0	2	20
Michigan:											
Detroit	61	59	1	1	0	20	3	4	1	29	309
Flint	9	9	0	5	0	0	0	0	0	0	21
Grand Rapids	8	7	0	0	0	1	0	0	0	8	24
Wisconsin:											
Kenosha	2		0				1				
Milwaukee	19	17	0	0	0	4	0	0	0	26	
Racine	3	2	0	0	0	0	0	0	0	3	17
Superior	3	3	0	0	0	1	0	0	0	0	9
WEST NORTH CENTRAL											
Minnesota:											
Duluth	8	2	1	0	0	0	0	0	0	3	23
Minneapolis	40	8	0	0	0	1	1	0	0	9	72
St. Paul	18	15	2	0	0	5	1	1	0	2	50
Iowa:											
Des Moines	10	10	0	2			0	1		0	28
Sioux City	2	1	0	0			0	0		1	1
Waterloo	2	2	0	11			0	0		0	

November 15, 1929

City reports for week ended October 26, 1929—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CEN- TRAL—CON.											
Missouri:											
Kansas City...	12	19	0	0	0	7	1	0	0	0	95
St. Joseph...	3	2	1	3	0	0	0	0	0	0	41
St. Louis...	31	22	—	1	0	15	3	0	0	6	248
North Dakota:											
Fargo...	2	4	0	0	0	1	0	2	0	3	4
Grand Forks...	2	0	0	6	—	—	0	0	—	0	—
South Dakota:											
Aberdeen...	1	1	0	0	—	—	0	0	—	2	—
Sioux Falls...	2	0	0	13	—	—	0	0	—	0	6
Nebraska:											
Omaha...	4	1	0	1	0	7	0	0	0	4	38
Kansas:											
Topeka...	5	12	0	0	0	0	1	0	0	2	5
Wichita...	6	—	1	—	—	—	0	—	—	—	—
SOUTH ATLANTIC											
Delaware:											
Wilmington...	4	0	0	0	0	1	1	0	0	0	30
Maryland:											
Baltimore...	13	24	0	0	0	10	6	4	3	27	205
Cumberland...	0	1	0	0	0	1	0	2	0	0	5
Frederick...	1	0	0	0	0	0	0	0	0	0	2
District of Colum- bia:											
Washington...	15	7	0	0	0	9	2	1	0	0	135
Virginia:											
Lynchburg...	2	0	0	0	0	0	0	1	0	10	6
Norfolk...	2	5	0	0	0	0	0	1	0	0	5
Richmond...	9	13	0	0	0	1	1	0	0	1	38
Roanoke...	4	8	0	0	0	0	1	0	0	0	19
West Virginia:											
Charleston...	2	2	0	0	0	1	1	0	0	0	17
Wheeling...	3	2	0	0	0	1	0	0	0	2	20
North Carolina:											
Raleigh...	2	1	0	0	0	1	0	0	0	0	18
Wilmington...	1	0	0	0	0	0	0	0	0	0	9
Winston-Salem...	3	0	1	0	0	5	0	1	0	0	18
South Carolina:											
Charleston...	1	2	0	0	0	0	1	1	0	0	27
Columbia...	0	1	0	0	0	1	0	0	1	4	20
Georgia:											
Atlanta...	2	24	0	0	0	2	1	1	0	3	47
Brunswick...	0	1	0	0	0	0	0	0	0	0	6
Savannah...	1	1	0	0	0	2	1	0	0	0	33
Florida:											
Miami...	1	2	0	0	0	3	1	0	0	3	23
St. Petersburg...	0	0	—	0	0	0	0	—	1	—	8
Tampa...	0	6	1	0	0	1	0	0	0	0	14
EAST SOUTH CEN- TRAL											
Kentucky:											
Covington...	3	0	0	0	0	0	0	0	0	0	18
Tennessee:											
Memphis...	5	2	0	0	0	1	3	4	0	2	67
Nashville...	3	1	0	0	0	3	4	1	1	6	—
Alabama:											
Birmingham...	4	8	1	0	0	3	1	2	1	2	69
Mobile...	0	0	0	0	0	0	0	0	0	0	23
Montgomery...	1	5	0	0	—	0	0	0	—	1	—
WEST SOUTH CEN- TRAL											
Arkansas:											
Fort Smith...	0	3	0	0	—	0	0	0	0	0	—
Little Rock...	3	2	0	0	0	0	1	2	0	0	—

City reports for week ended October 26, 1929—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL—CON.											
Louisiana:											
New Orleans	4	10	0	0	0	13	3	3	0	0	151
Shreveport	0	1	0	0	0	0	0	0	2	0	34
Oklahoma:											
Tulsa	2	5	0	1	—	—	0	1	—	3	—
Texas:											
Dallas	6	11	0	0	0	2	1	1	1	0	39
Fort Worth	2	3	0	0	0	2	0	0	0	0	27
Galveston	0	1	0	0	0	1	1	1	0	0	11
Houston	2	6	1	0	0	6	0	4	0	0	48
San Antonio	0	5	0	0	0	8	1	0	1	0	68
MOUNTAIN											
Montana:											
Billings	0	0	0	0	0	0	0	0	0	0	9
Great Falls	1	12	1	0	0	0	0	2	0	0	11
Helena	0	0	0	0	0	0	0	7	0	0	3
Missoula	0	0	0	4	0	1	0	11	0	0	5
Idaho:											
Boise	0	0	0	1	0	0	0	1	0	0	7
Colorado:											
Denver	8	9	0	1	0	8	1	0	0	4	75
Pueblo	1	0	0	0	0	0	1	0	0	0	4
New Mexico:											
Albuquerque	0	1	0	0	0	5	0	1	0	0	16
Utah:											
Salt Lake City	2	6	0	0	0	2	2	2	0	4	36
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	7
PACIFIC											
Washington:											
Seattle	8	5	1	0	—	—	1	1	—	9	—
Spokane	8	7	1	0	—	—	1	0	—	1	—
Tacoma	4	2	2	14	0	1	0	0	0	2	28
Oregon:											
Portland	8	2	3	2	0	2	0	0	0	2	68
Salem	0	0	0	0	0	0	0	1	0	0	—
California:											
Los Angeles	17	20	2	0	0	27	2	0	1	6	227
Sacramento	2	2	0	0	0	1	1	0	0	2	34
San Francisco	10	7	0	7	0	5	1	1	0	3	138
NEW ENGLAND											
Massachusetts:											
Boston	0	0	0	0	0	0	0	2	3	2	
Worcester	2	0	0	1	0	0	0	0	0	0	
Rhode Island:											
Providence	0	0	0	0	0	0	0	0	1	0	
MIDDLE ATLANTIC											
New York:											
Buffalo	0	0	0	0	0	0	0	0	6	1	
New York ¹	6	6	2	1	0	0	0	12	2	0	
Rochester	0	0	0	0	0	0	0	6	1	0	

¹ Typhus fever, 1 case at New York City, N. Y.

November 13, 1929

City reports for week ended October 26, 1929—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
MIDDLE ATLANTIC—contd.									
New Jersey:									
Camden.....	0	0	0	1	0	0	0	0	0
Newark.....	3	2	0	0	0	0	0	0	0
Pennsylvania:									
Philadelphia.....	2	2	0	0	0	0	2	3	0
Pittsburgh.....	0	1	0	0	0	0	0	3	1
EAST NORTH CENTRAL									
Ohio:									
Cleveland.....	0	0	0	0	0	0	1	1	0
Columbus.....	2	0	0	0	0	0	0	0	0
Indiana:									
Fort Wayne.....	1	0	0	0	0	0	0	0	0
Indianapolis.....	0	1	0	0	0	0	1	0	0
Illinois:									
Chicago.....	3	1	0	0	0	0	4	1	0
Springfield.....	0	0	0	0	0	0	0	1	1
Michigan:									
Detroit ²	6	4	0	0	0	0	1	0	0
WEST NORTH CENTRAL									
Minnesota:									
Minneapolis.....	0	0	0	0	0	0	1	1	0
Iowa:									
Des Moines.....	0	0	0	0	0	0	0	2	0
Missouri:									
Kansas City.....	0	1	0	0	0	0	0	0	0
St. Louis.....	2	1	0	0	0	0	0	0	0
SOUTH ATLANTIC									
Maryland:									
Baltimore.....	1	0	0	1	0	0	2	1	0
District of Columbia:									
Washington.....	0	0	1	1	0	0	1	1	0
North Carolina:									
Wilmington.....	0	0	0	0	0	1	0	0	0
Winston-Salem.....	0	0	0	0	0	1	0	0	0
South Carolina:									
Charleston.....	0	0	0	0	2	1	0	0	0
Columbia.....	0	0	0	0	0	1	0	0	0
Georgia:									
Atlanta.....	0	0	0	0	0	1	0	0	0
Savannah.....	0	0	0	0	1	0	0	0	0
EAST SOUTH CENTRAL									
Kentucky:									
Covington.....	0	1	0	0	0	0	0	0	0
Alabama:									
Birmingham.....	1	0	0	0	0	0	0	0	0
WEST SOUTH CENTRAL									
Louisiana:									
Shreveport.....	0	0	0	0	0	1	0	0	0
MOUNTAIN									
Utah:									
Salt Lake City.....	2	2	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle.....	3	0	0	0	0	0	1	0	0
Oregon:									
Portland.....	0	0	0	0	0	0	1	2	0
California:									
Los Angeles.....	1	0	0	0	0	0	1	0	0
Sacramento.....	0	1	0	0	0	0	0	0	0
San Francisco.....	0	1	0	0	0	0	0	0	0

² Rabies (in man), 1 case and 1 death at Detroit, Mich.

The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended October 26, 1929, compared with those for a like period ended October 27, 1928. The population figures used in computing the rates are approximate estimates, authoritative figures for many of the cities not being available. The 98 cities reporting cases have an estimated aggregate population of more than 31,000,000. The 91 cities reporting deaths have nearly 30,000,000 estimated population. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, September 22 to October 26, 1929—Annual rates per 100,000 population, compared with rates for the corresponding period of 1928¹

DIPHTHERIA CASE RATES

	Week ended—									
	Sept. 28, 1929	Sept. 29, 1928	Oct. 5, 1929	Oct. 6, 1928	Oct. 12, 1929	Oct. 13, 1928	Oct. 19, 1929	Oct. 20, 1928	Oct. 26, 1929	Oct. 27, 1928
98 cities.....	83	88	97	100	112	117	136	² 123	³ 135	131
New England.....	77	62	88	103	95	124	129	145	⁴ 111	156
Middle Atlantic.....	60	62	72	84	75	83	88	84	⁵ 86	99
East North Central.....	90	97	124	92	139	111	155	² 133	⁶ 164	154
West North Central.....	100	76	108	127	123	137	167	127	⁷ 138	158
South Atlantic.....	112	133	129	134	139	210	180	241	139	186
East South Central.....	136	161	156	154	231	231	170	231	183	168
West South Central.....	170	109	203	174	265	211	352	199	411	174
Mountain.....	26	106	26	106	0	44	70	62	26	27
Pacific.....	67	72	57	64	62	79	90	72	125	67

MEASLES CASE RATES

98 cities.....	13	19	17	28	22	32	30	² 40	³ 30	53
New England.....	18	55	34	65	16	69	59	179	⁴ 30	244
Middle Atlantic.....	10	10	12	18	12	27	17	20	21	25
East North Central.....	13	22	12	23	29	31	40	² 24	⁸ 47	41
West North Central.....	10	14	10	43	23	49	31	76	⁴ 22	49
South Atlantic.....	13	13	11	23	9	40	9	34	9	69
East South Central.....	0	0	0	0	14	7	0	14	²⁰ 0	0
West South Central.....	12	8	0	4	4	0	4	0	16	8
Mountain.....	44	9	35	44	61	53	52	71	26	124
Pacific.....	25	41	67	41	67	18	75	41	65	43

SCARLET FEVER CASE RATES

98 cities.....	95	77	102	99	115	113	138	² 111	³ 139	115
New England.....	100	83	130	90	163	138	174	152	⁴ 164	117
Middle Atlantic.....	42	38	48	42	48	58	69	69	75	57
East North Central.....	161	100	149	132	173	153	214	² 137	⁶ 193	151
West North Central.....	108	115	119	182	140	180	173	139	⁷ 176	215
South Atlantic.....	105	80	120	121	139	142	127	124	174	113
East South Central.....	75	210	81	133	122	154	231	133	¹⁰ 99	126
West South Central.....	75	85	75	150	134	97	107	73	¹⁵ 4	77
Mountain.....	139	62	131	18	148	80	157	89	235	62
Pacific.....	87	87	132	113	90	97	117	151	107	179

¹ The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1929 and 1928, respectively.

² South Bend, Ind., not included.

³ Barre, Vt., Kenosha, Wis., and Wichita, Kans., not included.

⁴ Barre, Vt., not included.

⁵ Kenosha, Wis., not included.

⁶ Wichita, Kans., not included.

November 15, 1929

Summary of weekly reports from cities, September 22 to October 26, 1929—Annual rates per 100,000 population, compared with rates for the corresponding period of 1928—Continued

SMALLPOX CASE RATES

	Week ended—									
	Sept. 28, 1929	Sept. 29, 1928	Oct. 5, 1929	Oct. 6, 1928	Oct. 12, 1929	Oct. 13, 1928	Oct. 19, 1929	Oct. 20, 1928	Oct. 26, 1929	Oct. 27, 1928
	4	2	7	3	7	1	12	13	10	2
98 cities.....										
New England.....	0	0	0	0	0	0	0	0	40	2
Middle Atlantic.....	0	0	0	0	1	0	0	0	0	0
East North Central.....	3	1	7	5	3	2	7	13	12	3
West North Central.....	8	2	2	2	13	0	21	2	32	2
South Atlantic.....	0	0	0	0	0	0	0	0	0	0
East South Central.....	0	7	48	0	0	0	0	0	0	0
West South Central.....	0	4	0	0	4	4	0	0	0	4
Mountain.....	96	9	52	9	96	9	122	62	52	0
Pacific.....	10	15	37	18	35	5	87	10	52	15

TYPHOID FEVER CASE RATES

98 cities.....	20	23	16	24	26	22	18	18	15	19
New England.....	7	9	11	16	16	16	9	7	16	16
Middle Atlantic.....	12	26	14	25	10	20	8	23	8	18
East North Central.....	9	14	12	13	8	11	10	7	7	10
West North Central.....	23	27	15	12	8	16	25	10	6	14
South Atlantic.....	17	27	30	33	26	38	24	40	21	44
East South Central.....	81	77	20	42	27	63	68	42	48	63
West South Central.....	28	41	8	53	28	28	16	8	43	24
Mountain.....	313	18	113	124	749	89	192	53	200	27
Pacific.....	10	13	10	28	7	26	20	13	5	13

INFLUENZA DEATH RATES

91 cities.....	5	6	6	7	8	7	8	10	9	11
New England.....	2	5	5	7	0	9	2	2	40	5
Middle Atlantic.....	5	2	7	7	8	4	6	7	12	8
East North Central.....	4	3	5	5	8	7	9	7	10	5
West North Central.....	3	3	6	3	3	3	9	12	3	12
South Atlantic.....	6	8	7	10	11	4	9	6	4	10
East South Central.....	0	8	0	23	22	15	7	46	22	8
West South Central.....	12	29	16	8	16	29	16	21	20	12
Mountain.....	17	0	0	18	26	9	17	62	17	44
Pacific.....	3	24	10	7	7	17	7	27	3	54

PNEUMONIA DEATH RATES

91 cities.....	67	68	77	87	80	81	97	105	108	89
New England.....	72	60	36	51	75	64	97	126	64	74
Middle Atlantic.....	72	75	93	106	87	94	118	124	144	92
East North Central.....	54	51	61	76	65	67	81	87	92	78
West North Central.....	81	81	108	89	54	64	69	77	73	61
South Atlantic.....	60	80	61	96	103	96	81	115	112	117
East South Central.....	118	123	30	107	59	92	111	92	133	130
West South Central.....	97	100	118	100	118	79	93	75	89	83
Mountain.....	70	35	122	62	122	115	122	62	122	124
Pacific.....	39	64	49	47	59	54	85	98	46	98

¹ South Bend, Ind., not included.² Barre, Vt., Kenosha, Wis., and Wichita, Kans., not included.³ Barre, Vt., not included.⁴ Kenosha, Wis., not included.⁵ Wichita, Kans., not included.

Number of cities included in summary of weekly reports and aggregate population of cities of each group, approximated as of July 1, 1929 and 1928, respectively

Groups of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1929	1928	1929	1928
Total.....	98	91	31,568,400	31,052,700	29,995,100	29,498,600
New England.....	12	12	2,305,100	2,273,900	2,305,100	2,273,900
Middle Atlantic.....	10	10	10,809,700	10,702,200	10,809,700	10,702,200
East North Central.....	16	16	8,181,900	8,001,300	8,181,900	8,001,300
West North Central.....	12	9	2,712,100	2,673,300	1,736,900	1,708,100
South Atlantic.....	19	19	2,783,200	2,732,500	2,783,200	2,732,900
East South Central.....	6	5	767,900	745,500	704,200	682,400
West South Central.....	8	7	1,319,100	1,289,900	1,285,000	1,256,400
Mountain.....	9	9	598,800	590,200	598,800	590,200
Pacific.....	6	4	2,090,600	2,043,500	1,590,300	1,551,200

FOREIGN AND INSULAR

Quebec Province—Communicable diseases—Week ended October 19, 1929.—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the week ended October 19, 1929, as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	4	Poliomyelitis.....	2
Chicken pox.....	36	Scarlet fever.....	88
Diphtheria.....	79	Smallpox.....	5
Influenza.....	1	Tuberculosis.....	55
Measles.....	58	Typhoid fever.....	6
Mumps.....	16	Whooping cough.....	75

CUBA

Habana—Communicable diseases—October, 1929.—During the month of October, 1929, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis.....	2	2	Measles.....	3	—
Chicken pox.....	13	—	Poliomyelitis.....	1	1
Diphtheria.....	27	4	Scarlet fever.....	5	—
Leprosy.....	3	—	Tuberculosis.....	166	36
Malaria.....	28	—	Typhoid fever.....	30	7

Provinces—Communicable diseases—Four weeks ended August 31, 1929.—During the four weeks from August 4 to 31, 1929, cases of certain communicable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....	8	1	1	1	1	1	12
Chicken pox.....	5	—	—	—	—	—	5
Diphtheria.....	1	8	1	10	3	2	25
Malaria.....	3	14	—	5	15	28	65
Measles.....	2	15	—	1	13	—	31
Paratyphoid fever.....	3	4	1	6	1	3	18
Poliomyelitis.....	1	—	—	—	—	—	1
Scarlet fever.....	1	—	—	1	—	—	2
Typhoid fever.....	63	74	12	91	20	44	304

DENMARK

Communicable diseases—August, 1929.—During the month of August, 1929, cases of communicable diseases were reported in Denmark as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	10	Paratyphoid fever.....	12
Chicken pox.....	5	Poliomyelitis.....	11
Diphtheria and croup.....	211	Puerperal fever.....	18
Influenza.....	1,859	Scarlet fever.....	149
Jaundice.....	93	Typhoid fever.....	20
Lethargic encephalitis.....	12	Undulant fever ¹	54
Measles.....	144	Whooping cough.....	697
Mumps.....	568		

¹ Reported from State serum institute.

November 15, 1929

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following table must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

CHOLERA

[C indicates cases; D, deaths; P, present]

Place	Apr. 7-May 4, 1929	May 4-June 1, 1929	June 1- June 20, 1929	June 20-July 27, 1929				August, 1929				September, 1929				October, 1929			
				3	10	17	24	31	7	14	21	28	5	12	19				
Ceylon	C 3 D 3 C 1 D 3	C 3 D 3 C 1 D 3																	
Colombo																			
China:																			
Anoy	C 4 D 3	C 10 D 5	7 5	1 1	1 1	2 2	2 2	2 2	1 1	1 1	1 1	1 1	P 1 30	483 30	130 23	2 8	3 9	30 2	
Canton	C 2 D 3	C 1 D 1																	
Manchuria— Kwantung—Dairen— Newchwankang	C 2 D 3	C 3 D 3	3 4	4 4	9 9	24 24	29 41	29 30	483 30	130 23	2 8	2 9	P 1 30	130 23	2 8	3 9	30 2		
Shanghai	C 2 D 3	C 3 D 3	3 4	4 4	3 3	2 2	1 1	1 1	1 1	1 1	1 1	1 1	P 1 30	130 23	2 8	3 9	30 2		
Swatow	C 4 D 3	C 7 D 4	2 2	3 3	3 3	2 2	1 1	1 1	1 1	1 1	1 1	1 1	P 1 30	130 23	2 8	3 9	30 2		
Tientsin	C 2 D 3	C 7 D 4	2 2	3 3	3 3	2 2	1 1	1 1	1 1	1 1	1 1	1 1	P 1 30	130 23	2 8	3 9	30 2		
Chosen: Chemulpo	C 2 D 3	C 2 D 3	2 2	2 2	2 2	1 1	1 1	1 1	1 1	1 1	1 1	1 1	P 1 30	130 23	2 8	3 9	30 2		
India:																			
Dacca	C 18,521 D 11,069	C 30,616 D 20,311	29,449 19,910	32,081 19,343	10,103 6,120	10,269 6,230	10,662 5,930	10,654 5,707	8,507 4,896	6,958 4,070	P 1 30	P 1 30	P 1 30	P 1 30	P 1 30	P 1 30	P 1 30	P 1 30	
Bassein	C 118 D 118	C 38 D 38	2 2	2 2	3 3	1 1	3 3	1 1	1 1	1 1	1 1	1 1							
Bombay	C 2 D 3	C 2 D 3	2 2	2 2	2 2	1 1	1 1	1 1	1 1	1 1	1 1	1 1							
Calcutta	C 288 D 464	C 924 D 663	275 176	275 157	65 24	64 36	41 18	43 13	36 15	24 15	32 16	32 12							
Korachi	C 1 D 6	C 1 D 6			1 1	1 3	1 6	1 4	1 4	1 4	1 6	1 6							
Madras	C 1 D 6	C 1 D 6			1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1							
Montelimar	C 1 D 8	C 1 D 8	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1							
Nerapatam	C 1 D 10	C 1 D 10	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1							
Rangoon	C 1 D 7	C 8 D 10	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1							

PLAQUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

CHOI ET AL. / Continued

IC indicates causes; Deaths: Preseent.

November 15, 1923

Place	February, 1929			March, 1929			April, 1929			May, 1929			June, 1929			July, 1929			August, 1929		
	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31	1-10	11-20	21-31
Lopburi.....	C 1	D 1	C 36	C 20	D 10	C 57	D 29	C 1	D 4	C 3	D 2	C 3	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Nagara Pathom.....	C 1	D 1	C 13	D 1	C 1	D 1	C 1	D 1	C 4	D 4	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Nagara Rajshima.....	C 1	D 1	C 10	D 1	C 1	D 1	C 1	D 1	C 4	D 4	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Sinud Songram.....	C 1	D 1	C 3	D 1	C 3	D 3	C 2	D 2	C 13	D 11	C 2	D 11	C 2	D 11	C 2	C 1	D 1	C 1	C 1	D 1	C 1
Sri Dharmaraj Province 1.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
On vessel:																					
S. S. Cap. St. Jacques, at Singapore, from Saigon-Cholon.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Angby, at Saigon-Cholon.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Cap. St. Jacques, at Singapore, from Saigon-Cholon.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Eritpura, at Madras.....	C 1	D 1	C 2	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Media, at Colombo, from Calcutta.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Saka Maru, at Calcutta.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
S. S. Shinsei, at Shanghai.....	C 1	D 1	C 6	D 1	C 6	D 6	C 6	D 6	C 6	D 6	C 6	D 6	C 6	D 6	C 6	C 6	D 6	C 6	C 6	D 6	C 6
S. S. Tokushima, at Hong Kong.....	C 1	D 1	C 2	D 1	C 2	D 2	C 2	D 2	C 2	D 2	C 2	D 2	C 2	D 2	C 2	C 2	D 2	C 2	C 2	D 2	C 2
S. S. Texas Maru, at Nagasaki, from Shanghai.....	C 1	D 1	C 2	D 1	C 2	D 2	C 2	D 2	C 2	D 2	C 2	D 2	C 2	D 2	C 2	C 2	D 2	C 2	C 2	D 2	C 2
Indo-China (French) (see also table above):																					
Annam.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Camboja.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Cochin-China.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Lao6.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1
Tonkin.....	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	D 1	C 1	C 1	D 1	C 1	C 1	D 1	C 1

There were 96 cases of cholera with 16 deaths in Naga Sdharma Province, Siam, from May 16 to July 7, 1929.
Reports incomplete.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAQUE
[C Indicates cases; D, deaths; P, present]

Place	PLAQUE						Week ended—					
	Apr. 7- May 4, 1929	May 6- June 1, 1929	June 2-9, 1929	June 16- July 27, 1929	July 30- Aug. 24, 1929	Aug. 31- Sept. 29, 1929	September, 1929	Oct. 7- 14, 1929	Oct. 14- 21, 1929	Oct. 21- 28, 1929	Oct. 28- Nov. 4, 1929	Nov. 2, 1929
Algeria:												
Philippeville	C				3	3	1					
Argentina:												
Buenos Aires	C	1										
Rosario	C	5			1							
Ares: St. Michael's Island	C											
Bolivia: Congo:	C											
Bukwa	D				3							
Bukki	C					2						
Djugu	D				2	3	2					
Rekwa	D				3	3	5	1	1	1		
Brazil: Porto Alegre (see also table below): Uganda	C	1					2					
British East Africa (see also table below): Uganda	D	231	450	1,437	1,437	840	153	134	125			
D219	400	1,072	1,190	730	135	118	118	108				
Canary Islands: Tenerife	D				1							
Laguna	C				1							
Colombo	C	5	7	2	P		1			1		
Plague-infected rats	D	4	6	3		6	1	1				
Galle	C					3						
Kandy	D					3		1	2			
Mataura	D					1		1				
China:	C					12						
Amoy	C					11						
Foochow	C					P		P				
Hong Kong	C					1						
Plague-infected rats	D					3		1	1			
Manchuria—Tungliao District	C					P						
						16						

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAGUE—Continued

[C] indicates change; D- deaths; P- present]

Union of Socialist Soviet Republics:									
Caucasus.									
Ural-Kirghiz.									
Union of South Africa:									
Cape Province.									
Orange Free State.									
On vessel:									
S. S. Chuban, at Port Said, from Jaffa.									
S. S. Tokio, at Shanghai, from Singapore.									
S. S. Ganran Maru, at Osaka, from Haifong.									
Steamship at Poco Novo, from Lakes.									
S. S. Seigo Maru, at Osaka, from Bombay—Plague-infected rats.									
S. S. Souduades, at Hamburg, from Rosario, Argentina—Plague-infected rats.									
S. S. Sumatra, at Osaka, from Bombay.									
Place		April, May, June, 1929		July, 1929		August, 1929		September, 1929	
British East Africa (see also table above):									
Kenya.									
Uganda.									
Ecuador: Guayaquil.									
Plague-infected rats.									
Greece (see also table above).									
Indo-China (see also table above).									
Madagascar (see also table above).									
Ambositra Province.									
Antsirabe Province.									
Itasy Province.									
Moramanga Province.									
Tananarive Province.									
Place		April, May, June, 1929		Place		April, May, June, 1929		Place	
Senegal:									
Bao1									
Dakar1									
Louga1									
Rufisque1									
Thies1									
Tivouane1									
Place		April, May, June, 1929		Place		April, May, June, 1929		Place	
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									
D									
C									

Incomplete reports.

CHOLELERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX

[C] indicates cases; D, deaths; P, present.]

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

Place	Week ended—							October, 1920							Nov. 2, 1920		
	Apr. 7- May 4, 1920	May 4- June 1, 1920	June 2- July 2, 1920	June 20- July 27, 1920	July 28- Aug. 31, 1920	September, 1920			7	14	21	28	5	12	19	25	
Great Britain:																	
England and Wales:																	
Ashton under Lyne	C	1,423	1,170	780	641	502	131	150	96	110	108	97	131				
Birmingham	C	1	1	4	3	1	1	1	1	3	1	2	1	1			
Bradford	C	1	1	4	3	1	1	1	1	3	1	2	1	1			
Bristol	C	1	1	4	3	1	1	1	1	3	1	2	1	1			
Cardiff	C	31	12	3	1	1	1	1	1	3	1	2	1	1			
Castlford	C	3	12	3	1	1	1	1	1	3	1	2	1	1			
Leeds	C	201	163	167	107	78	37	41	27	39	46	35	39				
London	C	888	656	496	363	297	79	81	59	85	81	60	67				
London and Great Towns	D	6	3	37	20	15	4	15	4	2	2	7	1	2	2	2	
Newcastle-on-Tyne	C	133	86	62	32	18	2	2	2	7	7	3	2	2			
Stoke-on-Trent	C	2	1	1	1	1	1	1	1	2	1	1	1	1			
West Ham	C	52	24	33	35	19	13	1	2	1	2	1	2	1			
Scotland:																	
Aberdeen	C	19	1	1	1	1	1	1	1	2	1	2	1	2	1	1	
Glasgow	C	77	40	53	53	11	17	2	1	2	1	2	1	2	1	1	
Greece (see table below).	D	52	24	33	35	19	13	1	2	1	2	1	2	1	1		
Hedjaz																	
Honduras:																	
Choluteca	C	17,011	11,549	7,838	5,481	1,166	1,043										
Puerto Castilla	C	22,536	4,185	3,006	2,032	1,418	231										
India:	D	5,000	208	147	92	63	18	5	6	8	7	5					
Bombay	C	315	131	99	55	31	10	3	5	6	2	4					
Calcutta	C	101	39	24	16	11	20	2	7	9	3	1	4				
Cochin	D	74	36	24	11	4	2	1	4	6	3	1	4				
Karachi	D	144	84	35	25	15	5	1	6	8	3	6	3				
	D	50	30	25	15	7	1	6	3	6	3	6	3				

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALL BOX—Continued

[C indicates cases; D deaths; P present]

November 15, 1929

354 cases of smallpox were reported from June 16 to Oct. 11, 1929, in Panama City, Panama.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

TYPHUS FEVER

[C indicates cases; D, deaths; P, present]

¹ During the period from Apr. 14 to May 21, 1929, 18 cases of typhus fever with 4 deaths were reported in Strabane, Tyrone County, Ireland.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

YELLOW FEVER

[C indicates cases; D, deaths; P, present]

Place	Apr. 7- May 4, 1929	May 5- June 1, 1929	June 2-20, 1929	June 30- July 27, 1929	Week ended—												
					August, 1929			September, 1929			October, 1929			November, Nov. 2, 1929			
					3	10	17	24	31	7	14	21	28	5	12	19	26
Belgian Congo: Tumba.....	C	1															
Brazil:																	
Bahia.....	C				1												
Niteroy.....	D				1												
Para.....	C									1							
	D	1	2	1	1												
Porto Alegre.....	D	11		1													
Rio de Janeiro.....	D	70	7														
Colombia:																	
Simacota.....	C				5	1											
Socorro ¹	C							4									
Liberia: Monrovia.....	C							12									
On vessel:																	
S. S. Shogland, at Porto Alegre, from Rio de Janeiro.....	C				4												
					3	1											
					1												

¹ Imported.² From June 19 to July 8, 1929, 41 cases of yellow fever with 23 deaths were reported in Socorro, Colombia.

X